Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Schaus <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:12 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-584

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Schaus
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Eberhard Veit <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:13 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-585

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Eberhard Veit
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of jeffrey sanders <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:13 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-586

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

jeffrey sanders
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robert Linzmeier <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:14 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-587

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robert Linzmeier

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Duff <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:14 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-58B

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Duff
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Cheryl Ivey <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:16 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-589

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Cheryl Ivey
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of James Swindler <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:16 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-590

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

James Swindler
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Amy Lippert <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-591

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Amy Lippert
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Alfred Qualiardi <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-592

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Alfred Qualiardi
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Pamela Kersting <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-593

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Pamela Kersting
[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Chris Rhodes <sierra@sierraclub.org>
Sent:	Thursday, January 22, 2015 7:21 PM
To:	Daniels, Simon
Subject:	NLRS Comments

NLRS
PC-598

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Chris Rhodes
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Serena Berntein <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:21 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-595

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Serena Berntein
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dwyane Johnson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:22 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-596

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dwyane Johnson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of James McConkey <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:22 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-597

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

James McConkey
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of William Labb <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-598

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

William Labb
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Peter Tijerina <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-599

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Peter Tijerina
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marybeth Conrad <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-600

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marybeth Conrad
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Christina Bueno <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-6a

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Christina Bueno
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Chris Skan <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-602

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

THANK YOU

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Chris Skan
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Peter Bertoncini <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:27 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-603

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Peter Bertoncini
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jamie Polczynski <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:28 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-604

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jamie Polczynski
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Hanley <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-605

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Hanley
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Julie McLauchlin <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:35 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-606

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Julie McLauchlin
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Bernadette Azuh <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:35 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-607

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Bernadette Azuh
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lee Canel <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:38 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-608

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lee Canel

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Laura Strong <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-609

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Laura Strong
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Evelyn Mott <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-6/9

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Evelyn Mott
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Concepcion Rodriguez <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-611

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Concepcion Rodriguez
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Brendan Connell <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-612

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Brendan Connell

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Timothy Miller <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-613

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Timothy Miller
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Melinda Keith-Singleton <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:41 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-614

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Melinda Keith-Singleton
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barbara Spietz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:43 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-~~6103~~
615

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barbara Spietz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of George Benjamin <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:43 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-616

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

George Benjamin
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of JAMES Aguirre <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:44 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-617

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

JAMES Aguirre
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patrick Sabol <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:44 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-61B

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patrick Sabol
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Alex Matthews <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-619

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Alex Matthews
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Janet Glidden <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
RC-620

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I live along the Kankakee River and although it is reported to be one of the cleanest rivers in Illinois, every summer afternoon late in the season, I see clumps of brown floating downstream. This is a daily occurrence and is spread across the width of the river. I do not know the cause, but suspect it is from runoff or discharge from a plant upstream. This has been happening for several years with little change, except that sometimes it seems worse. We need help!

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Janet Glidden

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Bonnie Helm <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-621

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Bonnie Helm
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Darlene Pietrzak <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-622

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Darlene Pietrzak
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jim Searle <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-623

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jim Searle
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Tina Brenza <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:46 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-624

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Tina Brenza

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Emily Projansky <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:46 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-625

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Emily Projansky

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Richard Bartkowicz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:46 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-626

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Richard Bartkowicz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Carol Gloor <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:47 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-627

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

I live along the Mississippi River in Illinois. Tributaries of the Mississippi continue to bring agricultural run off to this great River of our nation. This affects all areas along the watershed as well as the Gulf of Mexico algae bloom.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Carol Gloor

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joseph Naidnur <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:47 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-628

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joseph Naidnur

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of carolyn massey <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-629

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

carolyn massey
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Christine Obrien <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-630

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Christine Obrien

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Melissa Gutierrez <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-63

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Melissa Gutierrez

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ken Schulman <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-632

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ken Schulman
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Justine Bayod-Espoz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-633

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Justine Bayod-Espoz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joe Gold <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-634

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joe Gold
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ken Schmidt <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-635

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ken Schmidt
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of David Cybula <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-636

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

David Cybula
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ian Meyer <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-637

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ian Meyer

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Laura Northcraft <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-638

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Laura Northcraft

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Brock Auerbach-Lynn <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-639

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Brock Auerbach-Lynn
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Michael Hulburt <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-640

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Michael Hulburt
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dawn Albanese <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:59 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-641

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dawn Albanese
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Alicia Zody <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:59 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-642

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Alicia Zody

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Monica Brown <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:59 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-643

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Monica Brown
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robert Farina <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC - 644

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robert Farina

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Greg Henderson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-645

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Greg Henderson

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Sinclair <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-646

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Sinclair

[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Diane Gioe <sierra@sierraclub.org>
Sent:	Thursday, January 22, 2015 8:01 PM
To:	Daniels, Simon
Subject:	NLRS Comments

NLRS
PC-647

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Diane Gioe

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Clare Cadieux <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-648

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Clare Cadieux
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Cheryl Laskasky <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-649

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Cheryl Laskasky
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Veena Singwi <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-650

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Veena Singwi
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Rachel Tompkins <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-651

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Rachel Tompkins
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Andrew Stack <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:03 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-652

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Andrew Stack
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Terri Peterson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-653

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Terri Peterson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Angela DeBolt <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-654

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Angela DeBolt
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Beth Braun <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-656

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Beth Braun

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sam Boss <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-655

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sam Boss

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robin Reed <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:28 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-657

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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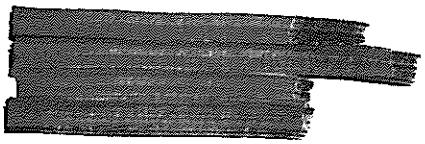
Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robin Reed



Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barbara Sullivan <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-658

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barbara Sullivan
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jennifer Cunningham <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:30 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-659

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jennifer Cunningham

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of todd fletcher <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:31 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-660

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

todd fletcher
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Bill and Fran Stenberg <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:34 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-661

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Bill and Fran Stenberg

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ian Shaw <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:34 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-662

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ian Shaw
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dori Cole <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:35 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-663

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dori Cole
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Leslie Malz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:35 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-664

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Leslie Malz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patrick Devine <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC- 665

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patrick Devine
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Debra McCullough <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-666

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Debra McCullough
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dr. Sharon Kissane <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-667

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dr. Sharon Kissane
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ali Minor <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-668

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ali Minor
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lenore Reeves <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-669

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lenore Reeves
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of buzz ALPERT <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-670

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

buzz ALPERT
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Christine Sneed <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-671

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Christine Sneed
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Justin Horstmann <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-672

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Justin Horstmann
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lynne Rooney-Katsma <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-673.

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lynne Rooney-Katsma
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of john johnson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:02 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-674

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

john johnson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Michael Weaver <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:03 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-675

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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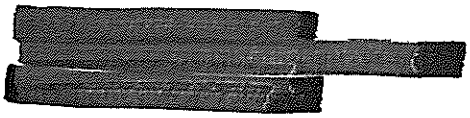
Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Michael Weaver



Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of TODD WILSON <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:03 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-676

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

TODD WILSON
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Peggy Schramm <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:03 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-677

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Peggy Schramm
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Charles Hess <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:04 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-678

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Charles Hess
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of arlene gardner <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-679

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

arlene gardner

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lee Johnson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-680

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lee Johnson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Bob Rayburn U.S. Veteran 1963-1967 <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-681

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Bob Rayburn [redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jeffrey Glenn <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-682

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jeffrey Glenn

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Carey Randall <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC 683

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Carey Randall
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Maria W <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-684

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Maria W
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Rachel Herbener <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:30 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-685

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Rachel Herbener
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Judy Shaver <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:32 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-686

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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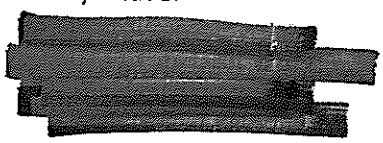
Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Judy Shaver



Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Susan Ingerham <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-687

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Susan Ingerham
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kristian Koerwitz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-688

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kristian Koerwitz

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Evelyn Bray <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-689

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Evelyn Bray
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Frank Hyden <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-690

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Frank Hyden
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Amber Simmons <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-681

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Amber Simmons
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mark Brooker <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-692

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mark Brooker
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Netzky <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-693

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Netzky
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Clifford Rot <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-684

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Clifford Rot
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joan Meyer <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-695

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joan Meyer
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kevin Metcalf <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-6 96

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kevin Metcalf

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jeffrey Courter <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 9:59 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-697

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jeffrey Courter
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sandra Vandersluis <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-698

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sandra Vandersluis
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Merle Hofmann <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-699

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Merle Hofmann
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of rohana wolf <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-700

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

rohana wolf
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ann Mallow <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:02 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 7d

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ann Mallow
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patty Kowalczyk <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-702

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patty Kowalczyk
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Pamela Pluta <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-763

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Pamela Pluta
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barbara Vesper <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:28 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-704

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barbara Vesper

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anne Griffin <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:28 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-705

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anne Griffin
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Nathan Macy <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
AC-706

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Nathan Macy
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Chelsea Peterson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-707

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Chelsea Peterson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Peeters <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-70B

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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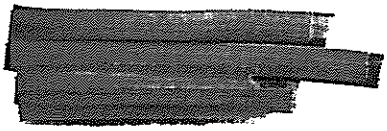
I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Peeters



Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of mike fontana <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-709

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

mike fontana
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of K Castelluccio <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-710

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

K Castelluccio
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marianne Flanagan <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-711

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marianne Flanagan

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ellen Savage <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-712

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ellen Savage

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Zack Frank <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-713

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Zack Frank
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marilyn Nicol <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-714

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marilyn Nicol
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Laura Sayen <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-715

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Laura Sayen

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Tamara Dreier <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 10:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-716

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Tamara Dreier
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Corinne Pumo <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-717

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Corinne Pumo

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Tracie Gabrisko <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-718

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Tracie Gabrisko
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sandra Buch <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-79

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sandra Buch
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kate Goetz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-720

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kate Goetz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Char Rush <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-721

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Char Rush
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Susan Leaver <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-722

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Susan Leaver
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kevin W <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-723

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kevin W
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karl Lang <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:28 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-724

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karl Lang
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Walter Schultz <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-725

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Walter Schultz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barbara Davidson <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-726

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barbara Davidson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Al Trutter <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-727

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Farmers in Illinois could do more to protect our water! I see examples of erosion and run off everyday when I walk or travel through the country roads in Illinois. It is shameful !!!!!!

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Al Trutter
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Aubrey iwanicki <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-728

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Aubrey iwanicki
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of dave gliva <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 11:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-729

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

dave gliva
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Carol Smith <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 4:54 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-752

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Carol Smith
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Gary Sorensen <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 5:24 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC- 753

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Gary Sorensen
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Beth Wegner <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:24 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-254

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Beth Wegner
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Charmian Larke <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:24 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-755

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Without targets set now the whole plan is in reality meaningless.
Please go one step further to bring meaning and action to the plan.
thanks

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution.
Thank you for your attention on this matter.

Sincerely,

Charmian Larke
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jeff Schroeder <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:24 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-756

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jeff Schroeder
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anthony Palombi <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:54 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-797

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anthony Palombi
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jenay DiOrio <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-759

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jenay DiOrio
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Linda Sullivan <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-760

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I am concerned about the streams that run by my home: the East Branch of the DuPage River, the Salt Creek, the West Branch of the DuPage River. I am concerned about the pond behind my children"s school, Terrace View Pond. I am concern when I read of Gulf Hypoxia, even though I don't live by the Gulf. I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Linda Sullivan
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jeremy Taylor <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-761

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jeremy Taylor
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Susan Leibowitz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 6:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-762

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Susan Leibowitz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Candace Lorkiewicz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:24 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-763

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Candace Lorkiewicz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of sylvia weaver <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-764

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

sylvia weaver
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John van Kleef <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-765

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States, because, guess what, we and all life need clean water.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John van Kleef
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of AURORA INSURRIAGA <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-766

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

AURORA INSURRIAGA

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sue Renz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-767

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sue Renz

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robin Heffron <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-768

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robin Heffron
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kelly Rodriguez <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:54 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-769

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kelly Rodriguez
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jonathan Zmek <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-770

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jonathan Zmek
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Tom Cordaro <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-271

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Tom Cordaro
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of sarita goyal <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 7:57 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-772

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

sarita goyal
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jared Miller <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 5:14 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-773

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jared Miller

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of MEL TAFF <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 5:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-774

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

MEL TAFF
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of RICHARD LEE <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 6:09 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-775

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

RICHARD LEE
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Margaret Wood <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 6:31 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-776

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Margaret Wood
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of matt Marani <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 5:40 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-777

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

matt Marani
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of SCOTT BAKER <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 4:51 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-77B

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

SCOTT BAKER
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Stephan Loubere <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 8:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-779

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Stephan Loubere
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of CHRIS BOLGER <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 7:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-780

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

CHRIS BOLGER

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jackson Smith <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 4:39 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-701

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jackson Smith
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of patti Mckinley <sierra@sierraclub.org>
Sent: Thursday, January 22, 2015 4:32 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-782

Jan 22, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

patti Mckinley
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ray Keltz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-783

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ray Keltz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of richard sanchez <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-784

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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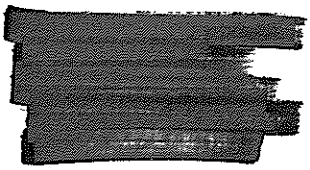
I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

richard sanchez



Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karen Koritko <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-785

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karen Koritko

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Pamela Janka <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-786

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Pamela Janka

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Craig Figtree <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-787

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Craig Figtree

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Linda Skisak <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:27 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-788

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Linda Skisak
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of sue Tinkle <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC- 789

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

sue Tinkle

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Petar Rogic <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 790

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Petar Rogic
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joselyn Williams <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-291

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joselyn Williams
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karina Pavlova <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-792

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karina Pavlova
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Paul Cassidy <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 783

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Paul Cassidy

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Allan Johnston <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:57 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-794

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Allan Johnston
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Meredith Asher <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-795

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Meredith Asher
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sydney Brady <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-796

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Sincerely,

Sydney Brady

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lowell Harp <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-797

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

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Sincerely,

Lowell Harp
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of richard sanchez <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-784

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

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Sincerely,

richard sanchez
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karen Koritko <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:25 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-785

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

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Sincerely,

Karen Koritko

[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Pamela Janka <sierra@sierraclub.org>
Sent:	Friday, January 23, 2015 8:26 AM
To:	Daniels, Simon
Subject:	NLRS Comments

NLRS
PC-786

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

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Sincerely,

Pamela Janka
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Craig Figtree <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-787

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

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Sincerely,

Craig Figtree

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Linda Skisak <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:27 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-788

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Sincerely,

Linda Skisak

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of sue Tinkle <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC- 787

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

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Sincerely,

sue Tinkle
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Petar Rogic <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 790

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Petar Rogic
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joselyn Williams <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-781

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joselyn Williams
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karina Pavlova <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-792

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karina Pavlova
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Paul Cassidy <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:56 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 783

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Paul Cassidy

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Allan Johnston <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:57 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-784

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Allan Johnston
[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Meredith Asher <sierra@sierraclub.org>
Sent:	Friday, January 23, 2015 8:58 AM
To:	Daniels, Simon
Subject:	NLRS Comments

NLRS
PC-795

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Meredith Asher
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sydney Brady <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-796

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sydney Brady
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lowell Harp <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 8:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-797

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lowell Harp
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lisa Culp <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 9:28 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-805

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lisa Culp
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Hemmer <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 9:29 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-806

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Hemmer
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ronaele Snyder <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 9:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-807

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ronaele Snyder
[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mark Washburn <sierra@sierraclub.org>
Sent:	Friday, January 23, 2015 9:56 AM
To:	Daniels, Simon
Subject:	NLRS Comments

NLRS
PC-808

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

In central Illinois more than 90% of the land is agricultural (corn and beans). The Sangamon River runs by our house and we can easily see the agricultural mud in the water after most rain events. No doubt the mud coming off the 90% of the county which is tilled contains fertilizer and pesticides. Farmers must be held responsible for the quality of runoff from their properties. Please set specific standards to control agricultural nutrients.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mark Washburn

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Don Dieckmann <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 9:58 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC- 807

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Don Dieckmann
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Linda Kennedy <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 9:59 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-810

Jan 23, 2015

Mr. Simon Daniels IEPA
IL .

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Linda Kennedy
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kathryn Potter <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:00 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-811

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kathryn Potter
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Connie Fischbein <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:00 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-812

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Connie Fischbein
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karen Bravo <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-813

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karen Bravo

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Eugene Timpe <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:27 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-814

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Eugene Timpe
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jim Norris <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-815

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jim Norris
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of m c kubiak <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:27 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-816

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

m c kubiak
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Michael Tye <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:28 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-817

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Michael Tye
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marty Brown <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:28 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-81B

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marty Brown
[redacted]

Daniels, Simon

From: Terry Ferguson[redacted]
Sent: Friday, January 23, 2015 10:29 AM
To: Daniels, Simon
Subject: Comments for nutrient loss reduction

NCRS
PC-818

Mr. Daniels,

I would like to comment as a producer on the claims of reductions in nitrogen loss for cover crops and bio-reactors. The solid statement of reductions of 30% and 40% for these 2 practices seems to be too absolute. Can you provide the scientific evidence that these numbers are correct in the real world?

The use of different application timing reflects a more truthful range of reductions These options should also be assigned a range of reductions.

It would seem that as cover crops improve structure and drainage that in fact they may cause more loss of nutrients over the long term.

The bio-reactor's effectiveness would also depend on flow rate of the tile and the maintenance of the system. During times of high flow the reactor would be less effective.

As a no-till farmer, that applies nitrogen in the form of DAP, weed and feed, starter at planting, nitrogen side-dress at planting, and finally side-dressing at knee high, I am deeply concerned about preventing nutrient loss while producing a bushel of grain with as little use of fertilizer as possible.

Please keep in mind that any program must be economically sound to be effective.

Sincerely,

Terry Ferguson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patrick Lorkiewicz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:29 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-820

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patrick Lorkiewicz
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robert m <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:30 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-821

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robert m
[redacted]

Daniels, Simon

From: David Erickso[redacted]
Sent: Friday, January 23, 2015 10:36 AM
To: Daniels, Simon
Subject: Comments Supporting the NLRS

NLRS
PC-822

Dear Illinois EPA Comments,

I am an [redacted] Illinois farmer and a member of Illinois Farm Bureau. I appreciate the Illinois Environmental Protection Agency and Illinois Department of Agriculture's lead in developing the Nutrient Loss Reduction Strategy. On our family farm, we have implemented many conservation and nutrient management practices through our own efforts. As a farmer, I want to make sure the nutrients I apply to my fields are efficiently used by the crops. On my farm, I use best management practices to care for the land and water to preserve both for my future generations. Current efforts by Illinois farmers have helped us learn how to implement practices to reduce nutrient losses, and we are always looking for new ways to improve the way we use nutrients on our farms. I appreciate that the Strategy continues to focus on the use of education, outreach and voluntary, incentive-based practices to address the agricultural issues. Nutrient use and its impact on water quality are complicated, and widespread adoption of necessary best management practices can result from the use of such tools. As a farmer, I take great pride in my work and in caring for the environment. I am committed to the continued use of best management practices to implement the concepts discussed in the Strategy.

Sincerely,

David C. Erickson
[redacted]

Daniels, Simon

From: Dennis Green <[redacted]
Sent: Friday, January 23, 2015 10:36 AM
To: Daniels, Simon
Subject: Comments Supporting the NLRS

NLRS
PC-823

Dear Illinois EPA Comments,

I am an Illinois farmer and a member of Illinois Farm Bureau. I appreciate the Illinois Environmental Protection Agency and Illinois Department of Agriculture's lead in developing the Nutrient Loss Reduction Strategy. As a farmer, I want to make sure the nutrients I apply to my fields are efficiently used by the crops. On my farm, I use best management practices to care for the land and water to hupreserve both for my future generations. Current efforts by Illinois farmers have helped us learn how to implement practices to reduce nutrient losses, and we are always looking for new ways to improve the way we use nutrients on our farms. I appreciate that the Strategy continues to focus on the use of education, outreach and voluntary, incentive-based practices to address the agricultural issues. Nutrient use and its impact on water quality are complicated, and widespread adoption of necessary best management practices can result from the use of such tools. As a farmer, I take great pride in my work and in caring for the environment. I am committed to the continued use of best management practices to implement the concepts discussed in the Strategy.

Sincerely,

Dennis W. Green
[redacted]

Randy Poskin[redacted]
Friday, January 23, 2015 10:37 AM
To: Daniels, Simon
Subject: Comments Supporting the NLRS

NLRS
PC-824

Dear Illinois EPA Comments,

I am writing in support of the NLRS. It is important that farmers are given the voluntary opportunity to optimize the use of nutrients on their farms. In order to get widespread adoption of new technology and innovation, farmers need to see and have a comfort level with the use of these concepts. Ag retailers, farmers, and regulators need to work together to educate and demonstrate best practices.
I farm in Iroquois County. In the past few years our weather has been a series of storms with heavy rainfall at vulnerable times in the growing season. It is a huge problem for farmers like myself to make crop input decisions of rate, place, and time in the face of adverse weather.

Sincerely,

Randy Poskin
[redacted]

Daniels, Simon

From:	Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marcia Carter <sierra@sierraclub.org>
Sent:	Friday, January 23, 2015 10:54 AM
To:	Daniels, Simon
Subject:	NLRS Comments

NCRS
PC-825

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marcia Carter
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Adam Baldwin <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:54 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-826

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Adam Baldwin
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Wendy Gosker <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:55 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-827

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Wendy Gosker
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of ellene shapiro <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:57 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-828

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

ellene shapiro
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Carol Pawlak <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:59 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-829

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Carol Pawlak
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Judy Syke <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 10:59 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-830

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Judy Syke
[redacted]

Andy Bartlow
Bartlow Farms
[redacted]

NLRS Comments
Illinois Environmental Protection Agency Bureau of Water
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276.

NLRS
PC-831

RECEIVED
JAN 21 2015
BUREAU OF WATER
BUREAU CHIEF'S OFFICE

January 19, 2015

To whom it may concern:

I am writing in support of the proposed Illinois Nutrient Loss Reduction Strategy which encourages the voluntary adoption of appropriate best management practices for farms in Illinois.

My family has been farming [redacted] for over 60 years. In that time, we've seen many technologies come along that have helped us make continual improvements to our farming business. Included in those technologies are best management practices that help preserve soil nutrients and protect water quality.

For example, we have already implemented conservation tillage, split application of nitrogen, side dressing of nitrogen, use of nitrification inhibitors, and using university recommended rates for nitrogen and phosphorus applications on our farm. We've seen the positive impact to our farm operation. I also know that these things have helped reduce nutrient runoff which helps protect water quality as well as preserve my economic investment. Split applications of nitrogen have helped us increase yields while applying the same or less nitrogen compared to our traditional approach of a single application of nitrogen.

I have committed to these conservation practices voluntarily and will continue to do so. I believe that the Strategy provides an adequate set of suggestions that other Illinois farmers can incorporate into their farms on a voluntary basis if they haven't already done so. I see many growers across the state implementing many of the practices that are outlined in the IL Nutrient Loss Reduction Strategy.

I am always looking for ways to improve my farm for the benefit of my family and our longevity in the business. Protecting our farm from both an economic and environmental perspective is what will keep our family farm sustainable for the next generation.

Sincerely,

Andy Bartlow

Andy Bartlow

BARTLOW

[redacted]

NLRS COMMENTS
IL ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF WATER
1021 NORTH GRAND AVE. EAST
P.O. BOX 19276
SPRINGFIELD, IL 62794-9276

62794-9276

NLRS
PC-832

RECEIVED
JAN 21 2015
BUREAU OF WATER
BUREAU CHIEF'S OFFICE

Illinois Environmental Protection Agency – NLRS Comment - January 20, 2015

Dear Simon Daniels,

My name is Garry Niemeyer; I farm [redacted] I am forwarding to you 2 years of dedicated work I have accomplished on our farm to work on the Illinois Nutrient Loss Reduction Strategy. We have several pictures enclosed that show how the farming community working with the agricultural industry, Best Management Practices group, the University of Illinois, the Lake Springfield Watershed group and Illinois Corn Growers Association have been successful in reducing nitrate-nitrogen loading from entering Lake Springfield. Our testing of nitrogen loss plus utilization of cover crops should go a long way in helping the farming community develop a voluntary plan to not only reduce the nitrogen loading but increase yields while saving nitrogen escapes using cover crops. It is really a win – win – win solution for everyone involved. We reduced our nitrogen application in the fall of the year by following the "Keep It For The Crop" formula and then applied urea in early summer coated with Agrotain. The purpose is to feed the corn plant when it needs it most, during the V9 through maturity thereby minimizing the chance for escape during the long fall to spring timeframe. Immediately after harvest we planted a cover crop of oats and radishes to make sure nutrients that were not used from the previous year would be ready for the next crop the following spring. If you will notice on the maps included, [redacted] incentive-based approach focused on the implementation of best management practices is the best method to reduce nutrient loss from Illinois Farm Fields. Another practice that we have implemented on the farm was back in 1995 when we planted a 23 acre filter strip around the farm to prevent run off of fertilizer and soil. I was President of the National Corn Growers Association in 2012. With my background and the desire to achieve a voluntary, incentive based program that local farmers could utilize, I have put together a power point presentation including photos in the packet represent. With this effort, I have made presentations to many ag and watershed groups sharing the information we have learned thru our efforts. This culminated in my being asked to present this information to multiple university group in

August of last year at Iowa State University. Iowa State had been awarded a USDA Grant to study Resilient Agricultural Practices Adapting to a Changing Climate.

I have worked with Dr. Brown from the University of Illinois, The Best Management Practices Group and having served as President of Illinois Corn Growers in 2002 with Illinois Corn Growers as well. In the past 15 years, I have had the opportunity to work with and thru organizations such as watershed groups and conservation groups. One thing that I have learned over the years is that voluntary farmer, incentive based results work best for all entities involved. There is no one size fits all and because farmers want the best for their land and crops, this is truly the best direction to take. By using the three step application program of growing corn, we have increased our yields on our own farms by 15% over the past 3 years. In 2013, our farm average was 227 bu./acre and in 2014 we are going to average over 260 bu./acre. That amounts to producing corn at .86 pounds of nitrogen/bushel of corn, fantastic results by any university standards being studied these days. We can make this work.

On the last few pages you can see the different rates of fertilizer we used in our Nitrogen trials and yield results. The last picture in the packet is of the cover crops we planted in the fall of 2014.

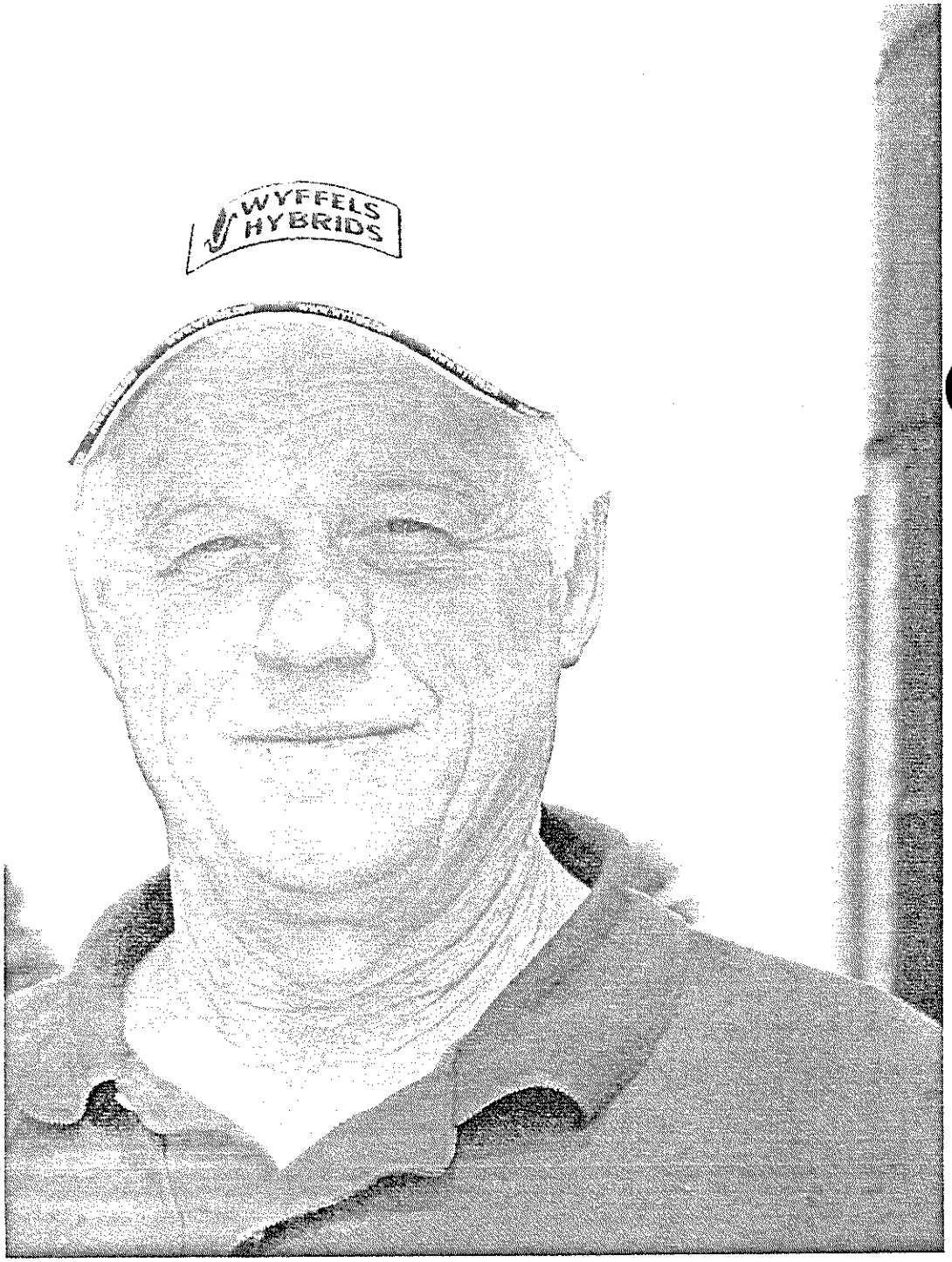
I am sure that you may have several questions as you look through this information. Please feel free to contact me at [redacted]

Again, thank you for the opportunity for me to make comments on this vital process of a voluntary, incentive based approach. On behalf of the farming community we can move forward together and achieve all of our goals as suggested in my report.

Sincerely,

Garry Niemeyer

Garry Niemeyer



Resilient Agriculture: Adapting to Changing Climatic Conditions

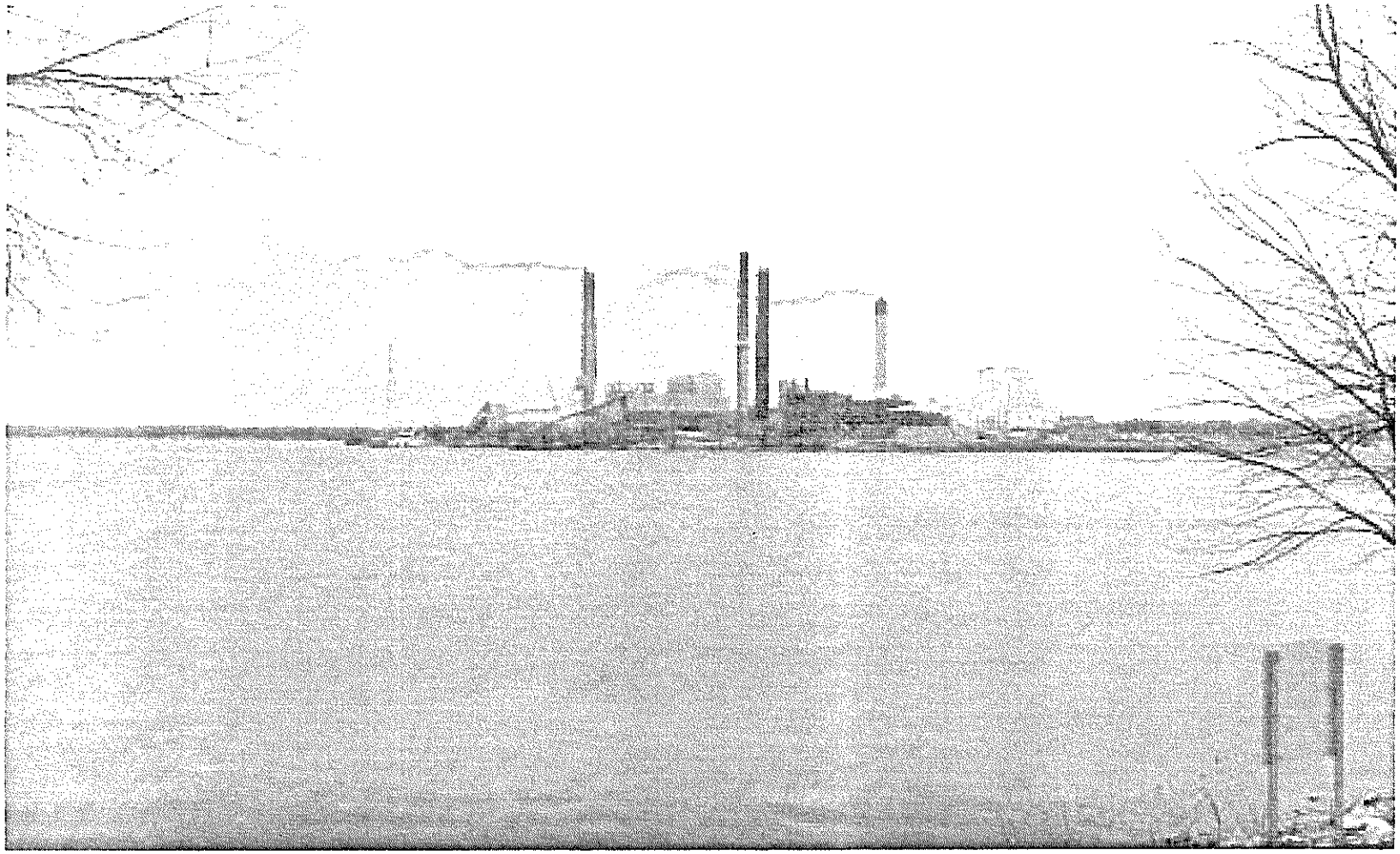
Garry Niemeyer

Past President of NCGA

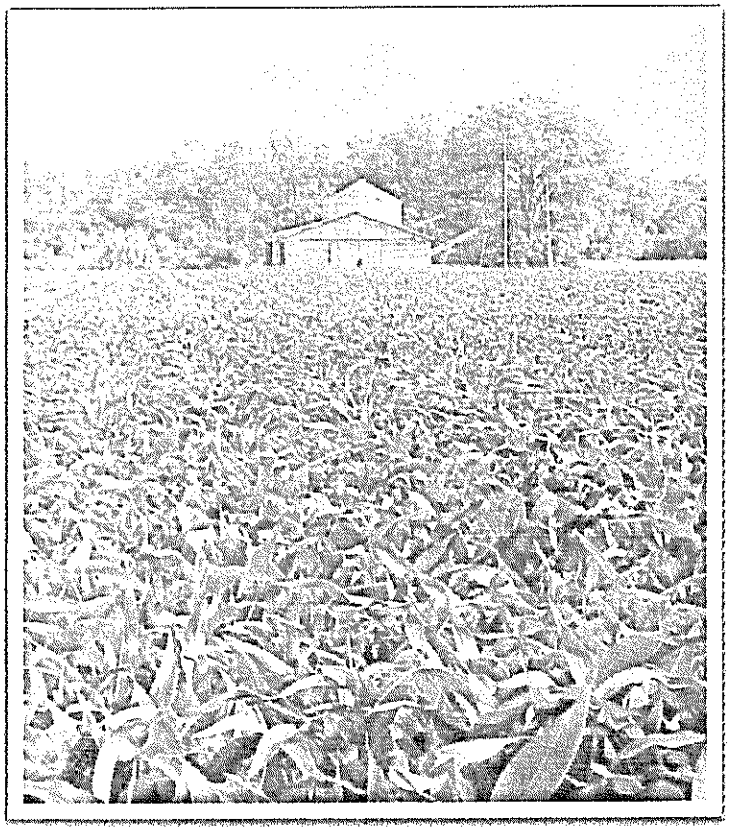
August 5-7, 2014

Ames, Iowa

Lake Springfield City Water Light and Power Watershed



What is Sustainability?



- Decreasing soil erosion and use of pesticides, fertilizers, irrigation and fuel
- Yields continue to increase
- Farmer Profitability

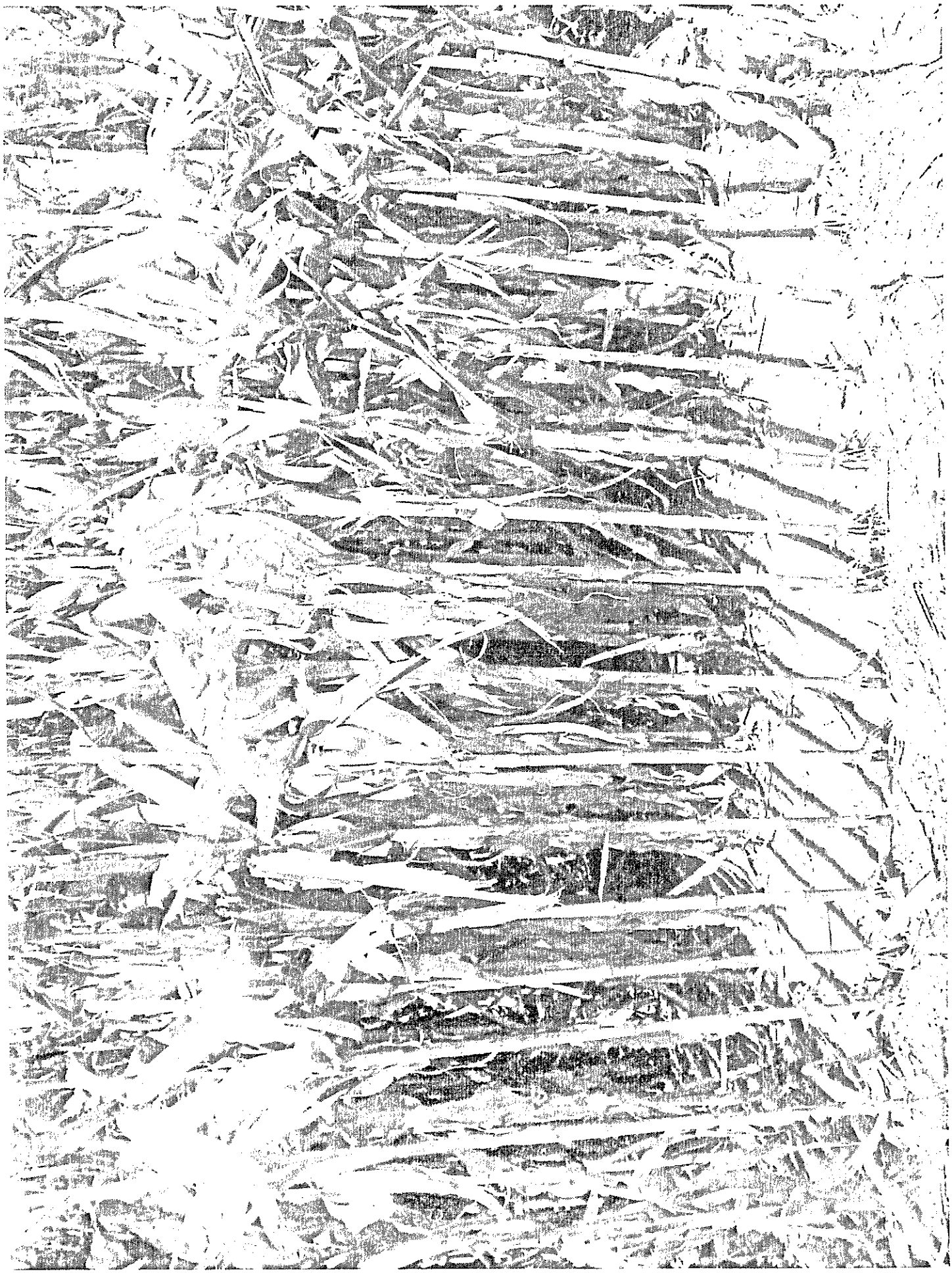
Corn's Impacts, 1987-2011

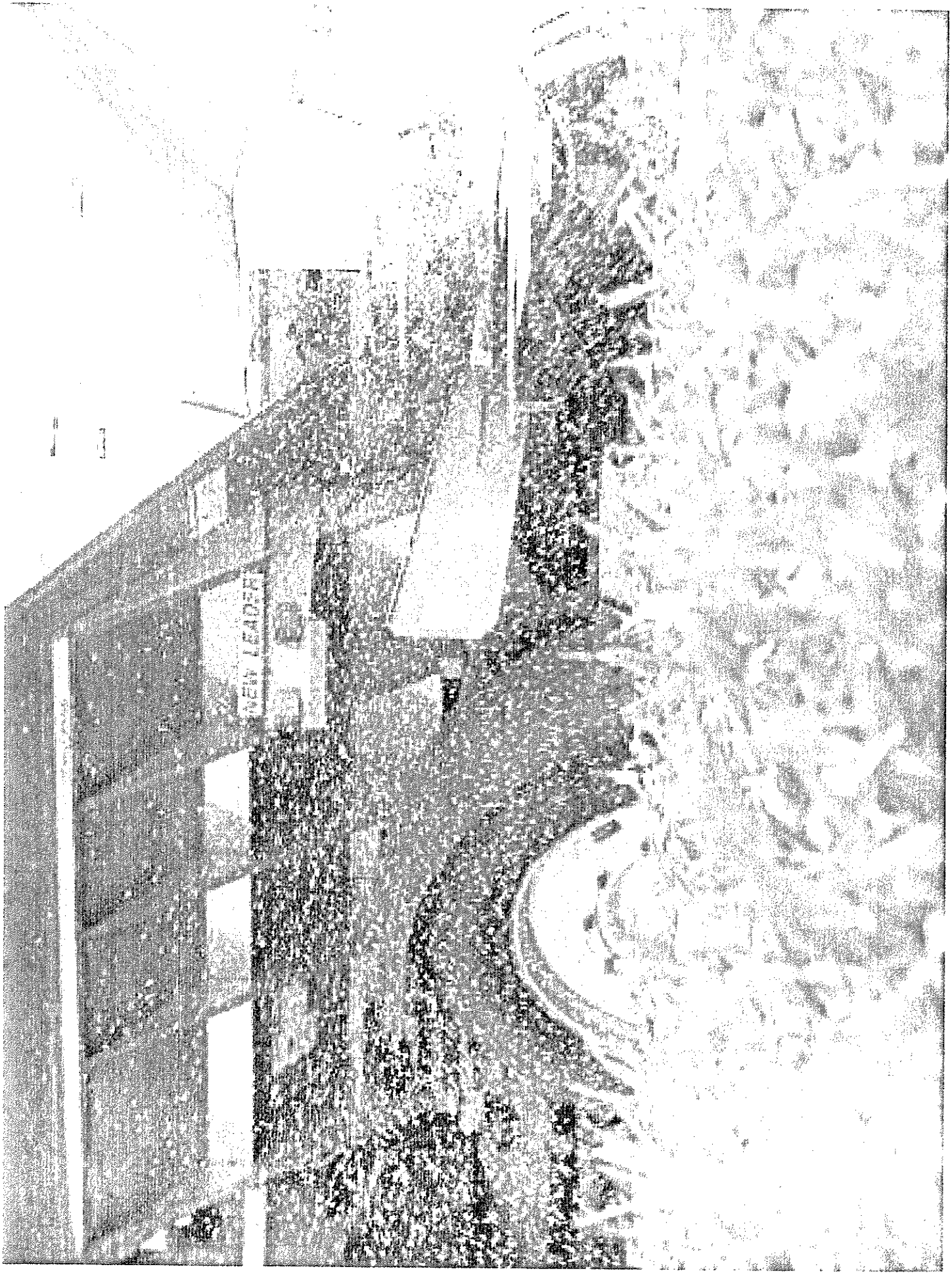
Land Use	Soil Loss	Irrigation	Energy	Climate
Amount of land to produce one bushel of corn	Soil loss per bushel, above a tolerable level	Irrigation water use per bushel	Energy used to produce one bushel	Emissions per bushel
37%	69%	27%	37%	30%

Keep It in the Crop

1. Right Source
2. Right Rate
3. Right Time
4. Right Place

- International Plant Nutrition Institute's 4 R Stewardship System.





Nitrogen Uptake During the Season

Nitrogen uptake in 3 - 40 day cycles 200 units

1. First 40 days - > V9 uptake is 15% 30 units
2. Second 40 days – V10 – R2 65% 130 units
3. Third 40 days – Brown silk/Black Layer 40 units

Doesn't it make sense to feed the corn plant when it needs nitrogen the most, the second 40 days!

3 Applications of Nitrogen per Season
(*instead of single anhydrous application*)

Increased corn yields 17.5 bu/acre...

17.5 bu/acre x $4.00/bu =
$70/a. – appl.cost=$50/a.extra profits

This is with the same amount of
N-application per acre per season

Weather determines the Final Results

The final outcome of our adaptive practices are determined by the weather.

1. In general, early planting to beat pollination problems generate best results.
2. Feeding the plant at the appropriate time yields best results.
3. Scouting your fields pays big dividends.
4. Do appropriate agronomic practices and be prepared for what the season brings.

Lincoln Land FS, Inc.

701 HENRY ST • P.O. BOX 667 • JACKSONVILLE, IL 62651-0667
PHONE: (217) 243-6561 • TOLL FREE (800) 978-7637 • FAX (217) 243-6567

	CORN/CORN	CORN/BEANS	SOYBEANS	WHEAT
YIELD GOAL	190	220	60	80
PRICE/BUSHEL	$4.70	$4.70	$12.25	$6.00
GROSS $ / ACRE	$893.00	$1,034.00	$735.00	$480.00
COST PER ACRE				
NITROGEN	$106.20	$97.50	$0.00	$58.00
PHOS	$43.54	$50.41	$30.39	$28.94
POTASSIUM	$21.80	$25.25	$33.15	$25.50
CHEMICAL	$45.00	$45.00	$48.00	$12.00
INSECTICIDE	$8.00	$6.00	$0.00	$0.00
SEED	$134.00	$134.00	$68.00	$42.00
LIME	$15.00	$14.00	$11.00	$8.00
FUNGICIDE	$16.00	$16.00	$16.00	$16.00
OTHER	$23.00	$23.00	$10.00	$8.00
INSURANCE	$30.00	$30.00	$25.00	$0.00
TOTAL INPUT	$442.54	$441.16	$241.54	$198.44
INTEREST RATE	4.00%	4.00%	4.00%	4.00%
INTEREST	$17.70	$17.65	$9.66	$7.94
NET GROSS	$432.76	$575.20	$483.80	$273.62
HARVEST	$38.00	$38.00	$32.00	$32.00
TRUCKING	$22.80	$26.40	$7.20	$9.60
PLANTING	$13.00	$13.00	$15.00	$15.00
CHISEL	$18.00	$15.00	$15.00	$0.00
FIELD CULT /DISK	$20.00	$10.00	$10.00	$10.00
N APP	$13.50	$13.50	$0.00	$7.00
DRY APP	$6.00	$6.00	$6.00	$6.00
CHEM APP	$14.00	$14.00	$14.00	$7.00
GRAIN CART	$7.60	$7.60	$6.30	$6.30
OTHER	$10.00	$10.00	$10.00	$9.00
MACHINERY COSTS	$162.90	$153.50	$115.50	$101.90
NET PROFIT	$269.86	$421.70	$368.30	$171.72
LAND COST	$360.00	$360.00	$360.00	$360.00
NET PROFIT AFTER	($90.14)	$61.70	$8.30	($188.28)

Know your cost of Production

Table 1. Corn Revenues and Costs, Central Illinois -- High Productivity Farmland, Actual for 2006 through 2013 Projected for 2014.[1]

	Year							
	2007	2008	2009	2010	2011	2012	2013	2014P
Yield per acre	201	199	192	168	174	126	197	196
Price per bu	$4.12	$4.07	$3.62	$5.07	$6.24	$6.93	$4.65	$4.20
Crop revenue	$828	$810	$695	$852	$1,086	$873	$916	$823
ARC/PLC or ACRE	0	0	8	0	0	0	0	10
Direct payments	25	25	24	24	24	24	22	0
Crop insurance proceeds	0	22	5	32	23	295	61	0
Gross revenue	**$853**	**$857**	**$732**	**$908**	**$1,133**	**$1,192**	**$999**	**$833**
Fertilizers	90	124	185	122	159	200	193	163
Pesticides	40	46	52	44	50	49	66	60
Seed	55	67	90	95	96	108	114	119
Drying	9	19	38	22	19	16	24	23
Storage	8	11	14	13	8	7	8	5
Crop insurance	20	27	25	18	30	25	27	27
Total direct costs	**$222**	**$294**	**$404**	**$314**	**$362**	**$405**	**$432**	**$397**
Machine hire/lease	8	8	9	8	8	10	11	11
Utilities	4	4	4	4	4	5	5	5
Machine repair	16	17	18	17	17	22	22	24
Fuel and oil	18	22	13	17	18	23	24	24
Light vehicle	2	2	1	2	1	2	2	2
Mach. depreciation	23	29	35	38	39	55	63	66
Total power costs	**$71**	**$82**	**$80**	**$86**	**$87**	**$117**	**$127**	**$132**
Hired labor	9	11	12	13	14	14	16	17
Building repair and rent	4	5	5	4	5	8	6	7
Building depreciation	4	5	5	6	6	9	5	6
Insurance	9	10	7	8	8	9	10	10
Misc	6	7	7	8	8	8	8	8
Interest (non-land)	18	14	14	13	13	11	11	11
Total overhead costs	**$48**	**$52**	**$50**	**$52**	**$54**	**$59**	**$56**	**$59**
Total non-land costs	**$341**	**$428**	**$534**	**$452**	**$503**	**$581**	**$615**	**$588**
Operator and land return	**$512**	**$429**	**$198**	**$456**	**$630**	**$611**	**$384**	**$245**
Land costs	166	197	209	215	248	270	290	293
Farmer return	**$346**	**$232**	**-$11**	**$241**	**$382**	**$341**	**$94**	**-$48**

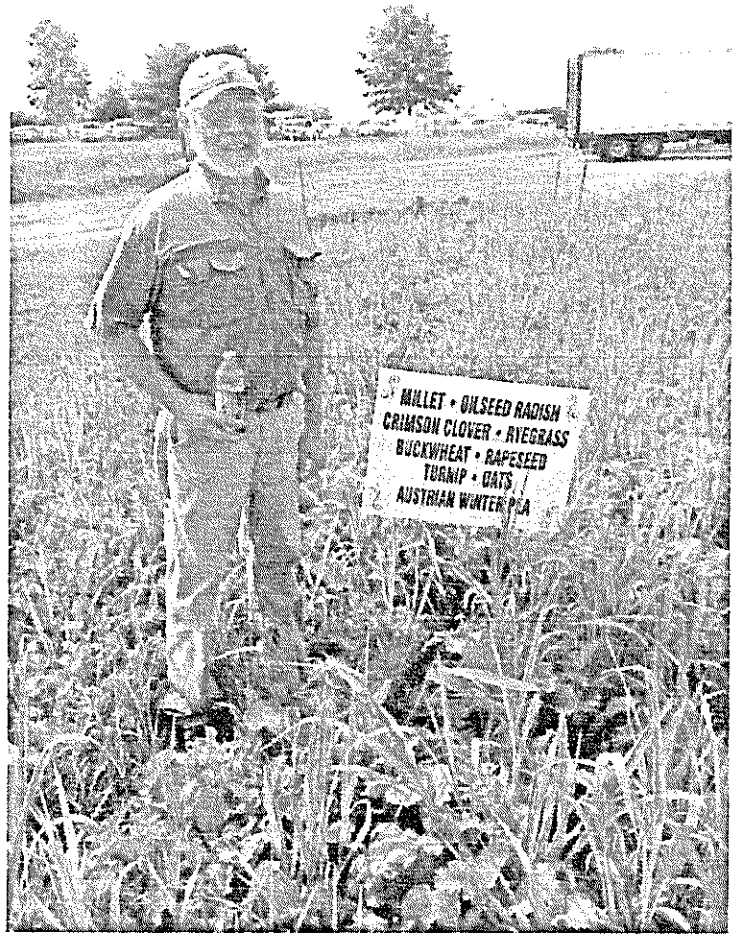
The Basics of Cover Crops

- Oats and radishes are the preferred cover crop
- Plant 30-45 days before a killing frost
- Cereal Rye is next level up for management
- Cereal Rye is generally used before soybeans because it offers a yield increase if there is a cyst nematode problem in that field. 40-80 % reduction and a 3 – 10 bushel yield increase.
- Cover crops sequester nitrogen left over in the soil profile from previous crops.

Cover Crops with Mike Plummer

Resolves Soil Problems

1. Soil Microbial Issues
2. Soil Compaction
3. Erosion Issues
4. Improve Organic Matter and Soil Structure Issues
5. Improves water quality



Tile shut off design to keep water in the pattern tile

The design allows water to go thru the tile during flooding and then can automatically be shut down after the excessive water has been released in a pattern tiling design to keep water in the system for the growing crop.

Conclusions-Adaptive Practices

Many different practices including mechanical, timing of application, variable fertilizer rates, tiling and other farmer practices including prescription population and spacing

Cover Crop technologies available for application.

New Commercial technologies coming on line.

Sustainability begins with farmer profitability from the land with proper management.

In general, one size regulations does not fit every farm.

Therefore, more cooperative research is necessary including University and On the Farm testing.

Weather and markets have the final say as to profits.

Effective Policies such as the RFS are critical to profitability.

Ultimately you have to deal with the weather cards that you are dealt using Adaptive Management

Commercial Fertilizer 2013

Date: 1/9/2014
Field: SCHNIRRING NORTH
Farm: GARRY NIEMEYER
Grower: NEIMEYER, GARRY
Field Area: 170.48 ac
Applied Area: 92.46 ac
Lat: 39.69462°N
Lon: 089.65927°W

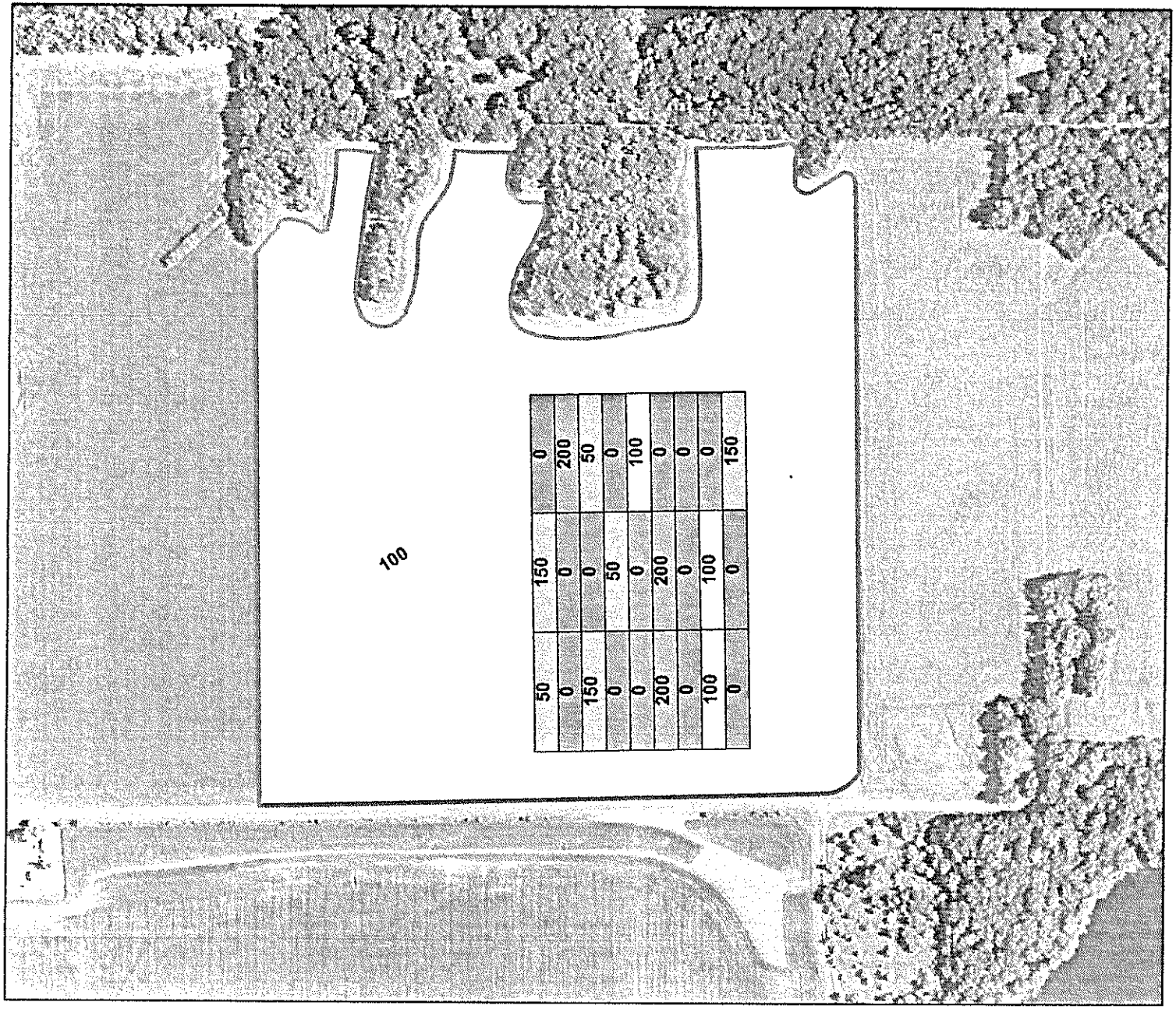
N

One in = 833 feet
0 313 626 939 1252 1565

Anhydrous Ammonia (gal/ac)	
0.1 - 86.4	(3.11 ac)
86.5 - 100.2	(43.30 ac)
100.3 - 114.3	(29.51 ac)
114.4 - 151.6	(2.18 ac)
151.7 - 254.2	(2.80 ac)

Niemeyer - Schnirring North N-Rate Plots (Fall)

Plot Layout



SchnirringNorth_Poly

LbsN, Season

- 0, Spring
- 0, Fall
- 50, Fall
- 100, Fall
- 150, Fall
- 200, Fall

0 250 500 1,000 1,500 2,000 Feet

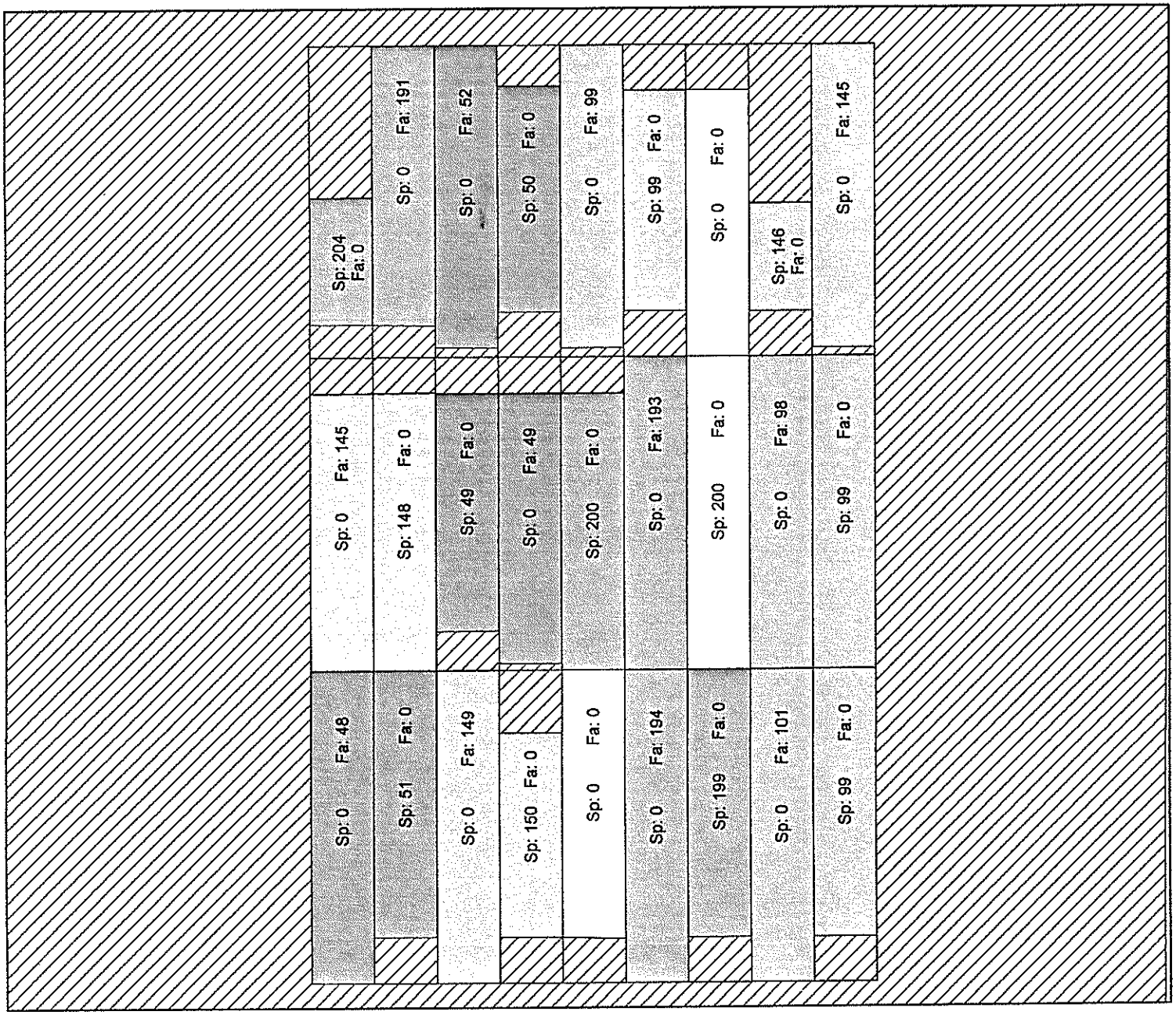
N W E S

PAQ Interactive Inc. (217) 762-7955
www.paqinteractive.com

Map Produced Nov 13, 2013

Schnirring North - As Applied Analysis

N Rate Trial



LbsN

- 0
- 50
- 100
- 150
- 200
- Outside of Rec

Labels represent average rate of Nitrogen applied as Lbs per acre for each application.
Fa: = Fall application
Sp: = Spring application

0 250 500 Feet

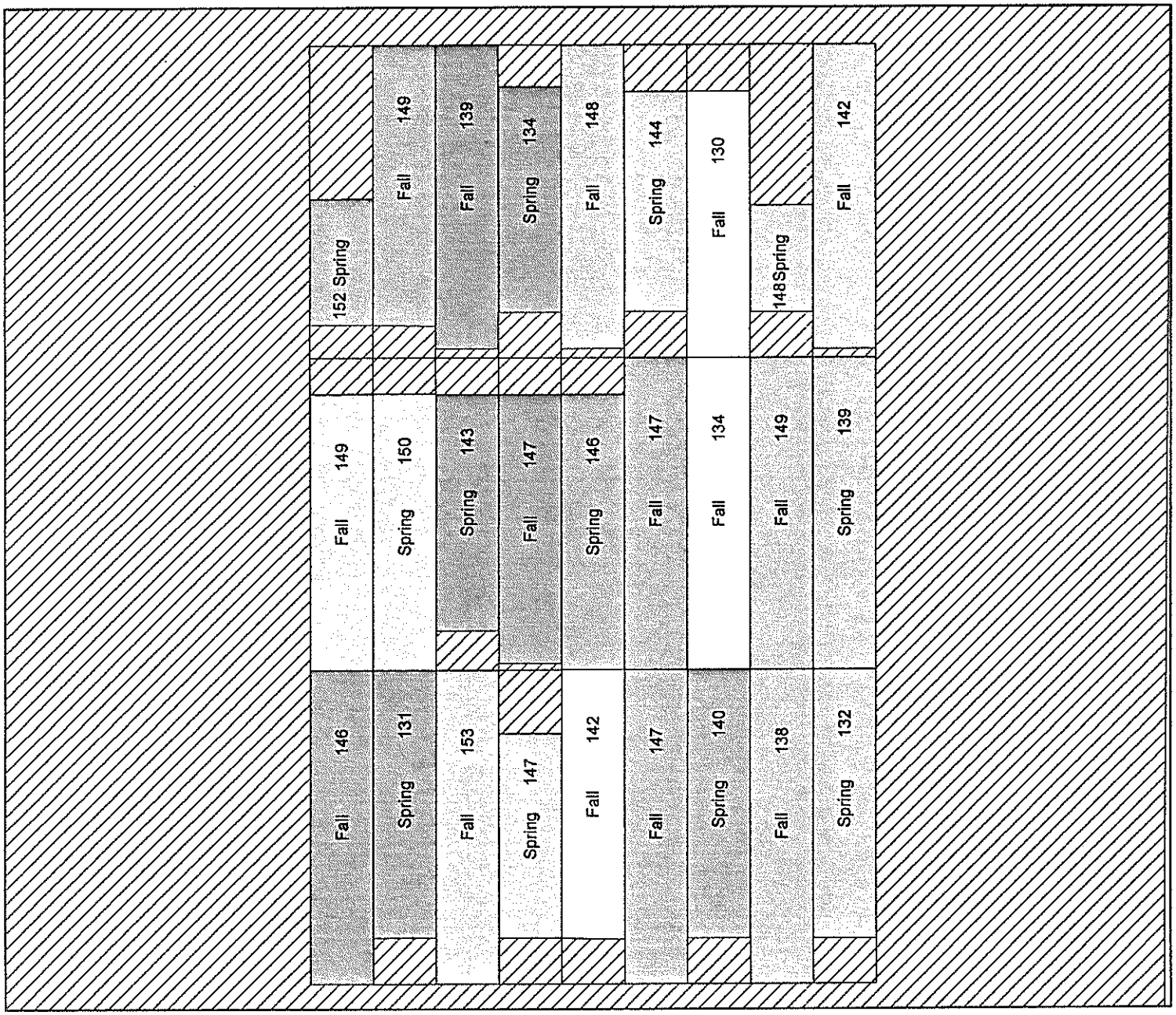
N W E S

PAQ Interactive Inc. (217) 762-7955
www.paqinteractive.com

Map Produced Oct 03, 2014

Schnirring North - 2014 Corn Yield Analysis

N Rate Trial



LbsN

- 0
- 50
- 100
- 150
- 200
- Outside of Rec

Labels represent season that Nitrogen was applied, and the average Corn yield as Bushels per acre for each plot.

0 250 500 Feet

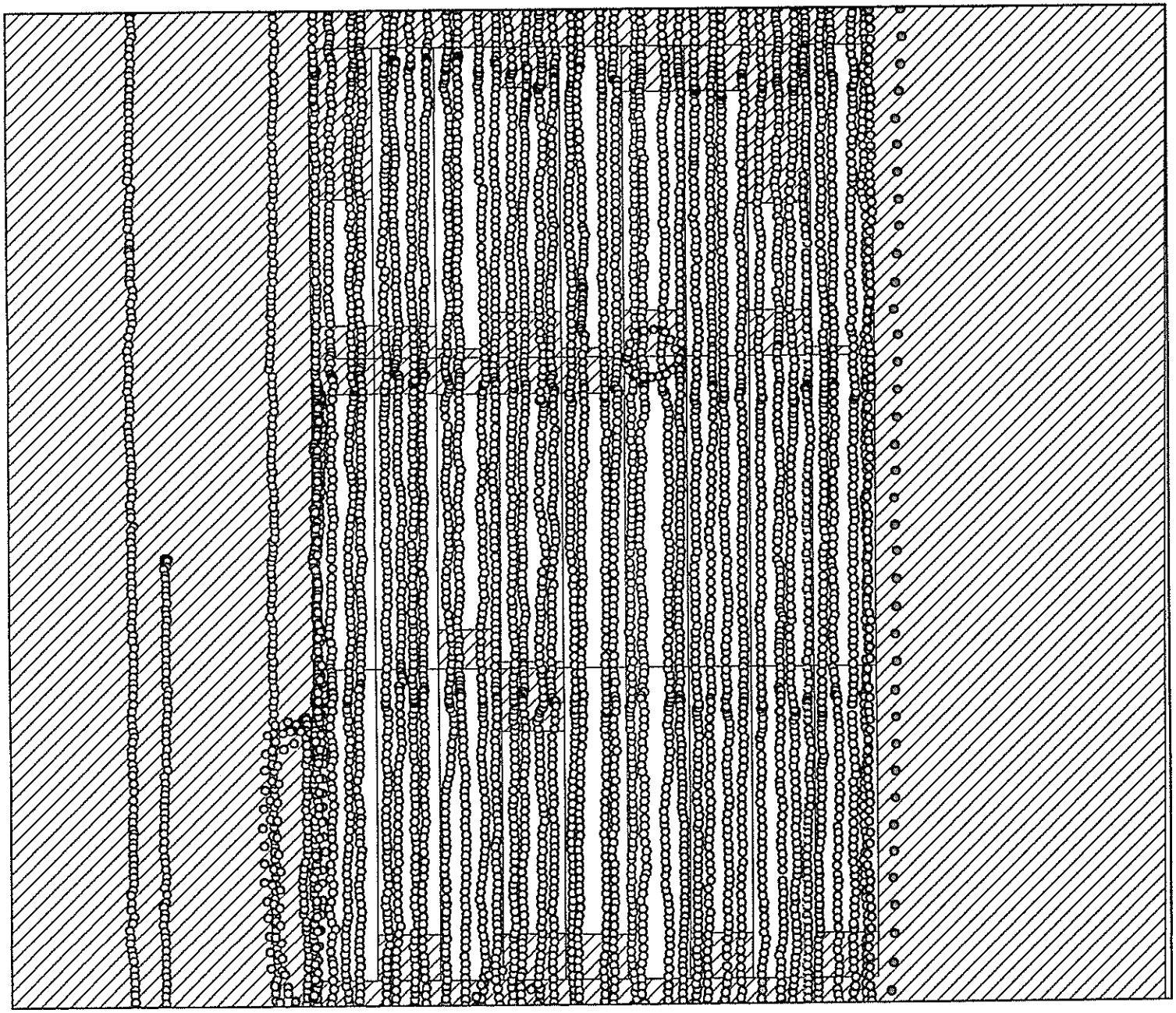
N W E S

PAQ Interactive Inc. (217) 762-7955
www.paqinteractive.com

Map Produced Oct 03, 2014

Schnirring North - 2014 Corn Yield

N Rate Trial



Yld_Vol_Dr

- 0 - 65
- 66 - 151
- 152 - 287
- 288 - 581
- 582 - 953

Analyze

- Y
- N

0 250 500 Feet

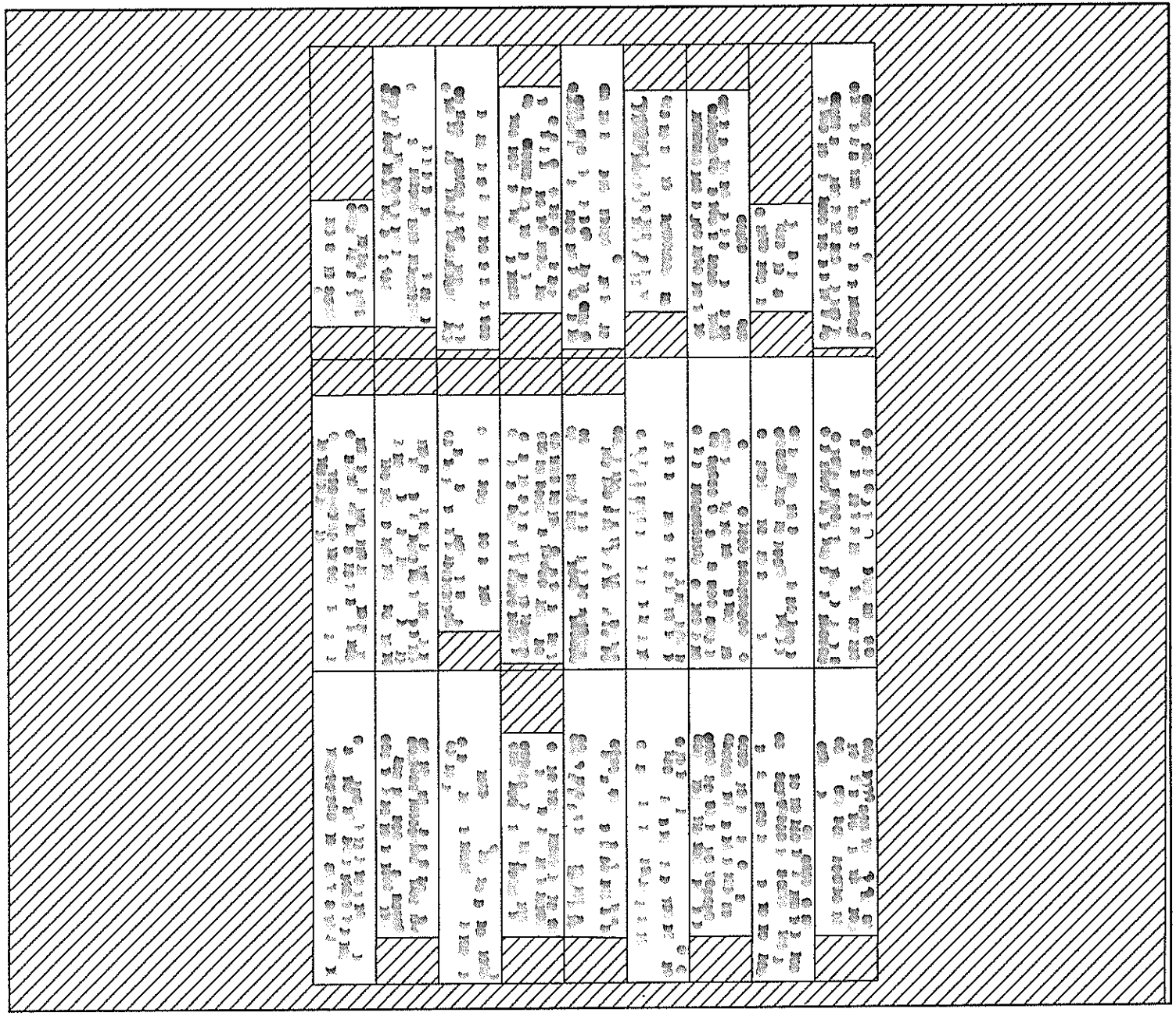
N W E S

PAQ Interactive Inc. (217) 762-7955
www.paqinteractive.com

Map Produced Oct 03, 2014

Schnirring North - 2014 Corn Yield Selected Points

N Rate Trial



Yld_Vol_Dr

- 15 - 72
- 73 - 132
- 133 - 156
- 157 - 188
- 189 - 277

Analyze

- Y
- N

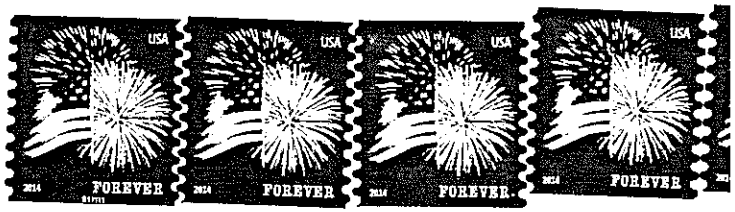
0 250 500 Feet

N W E S

PAQ Interactive Inc. (217) 762-7955
www.paqinteractive.com

Map Produced Oct 03, 2014

GARRY L. NIEMEYER
[redacted]



NLRS COMMENTS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF WATER
1021 NORTH GRAND AVE. EAST
P.O. BOX 19276
SPRINGFIELD ILLINOIS 62794-9276

MAIL

John Richard Lyons

Lyons Farm

[redacted]

RECEIVED

JAN 21 2015

BUREAU Or WATER
BUREAU CHIEF'S OFFICE

NLRS
PC-B 33

NLRS Comments

Illinois Environmental Protection Agency Bureau of Water

1021 North Grand Ave. East

P.O. Box 19276

Springfield, IL 62794-9276

Date: 1-1-2015

To whom it may concern:

I am writing in support of the proposed IL Nutrient Loss Reduction Strategy which encourages the **voluntary adoption** of appropriate best management practices for farms in Illinois.

I am a 4th generation farmer [redacted]arming since 1972. Soil conservation has been an on-going practice on the farm since I was made aware of the amount of siltation taking place in [redacted] With the exception of 40 acres, the entire Lyons Farm is situated [redacted] With this impetus in mind, I have practiced continuous no-till since 1988 in the production of corn, soybeans, and wheat. A corn-soy 2 year rotation is maintained on lands of less than 2% slope while the 3 year rotation of corn, soybeans, wheat and double crop soybeans after wheat is maintained on fields with areas of greater than 2% slope. All drainage ditches and streams have NRCS approved filter strips on them. Cover crops have been planted for the last two years. The first year was a trial year of 40A of tillage radishes and spring oats with 40A of annual ryegrass. The second year has 40A of radishes and oats again on soybean stubble with all 153A of corn stalks planted to cereal rye. Fertilizer, phosphorus and potassium, is applied at a maintenance level based on crop removal by field. All nitrogen is stabilized in the fall and spring and split applied at a 60% for fall (strip till) and 40% for spring application (side dress at the 2-5 leaf stage) with corn. N rates for corn are based on the last 5 years of crop yields and applied at 1# of N per bushel of corn. N rates for wheat are based on the last 5 years of

crop yield and applied through di-ammonium phosphate in the fall, 28% N for tiller initiation, and 28% N for grain fill. Total N is based on 1.25 lbs. of N per bushel of wheat. Again all nitrogen is stabilized. The 4 R's of fertilizer management have been practiced for many years on this farm before the concept and name was ever given to the practice. All fields are grid sampled (2.5 A) and tested every 4 years.

I voluntarily carryout the above best management practices on the farm. My landlords and I receive payment for our filter strips and I have an EQIP contract on my cover crops. We would be carrying out these practices with or without payment for soil conservation and soil health's sake.

All of my fields are tiled and a part of a drainage district. As a commissioner of the drainage district, I have contacted Dr. Ruth Book for a preliminary design of a bioreactor for our drainage district to help eliminate any excess nitrates which are leaving through the tile lines.

The "greater good" is always in my mind as well as being able to economically sustain my farm operation. I detest the greed of large cash grain farmers who are interested only in the bottom line with little regard for the preservation and welfare of our soils as well as our agriculture communities. **I want the nutrient loss reduction strategy to be a voluntary action by the farmers who choose to care for and preserve the fields which they farm.** For those individuals who do not wish to carry out best management practices which reduce the loss of excess nutrients to our streams, lakes and rivers, I would like to see stiff financial penalties assessed to them.

I believe that it is the duty of the ILEPA to educate all farmers and farm landowners in the nutrient loss reduction strategy. After education has taken place, those individuals who do not voluntarily adapt BMP's for nutrient loss should be dealt with severely. The future of our great Midwestern soils, the quality of our nation's waters and the future of generations of farmers to come depend on this action.

Thank you for considering my comments!

Sincerely,

John Richard Lyons

J. Richard and Sharon Lyons
[redacted]

SPRINGFIELD IL 625
20 JAN 2015 PM 2 T

ILEPA Bureau of Water
1021 N. Grand Ave. East
P.O. Box 19276
Springfield Il. 62794-9276

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Laura Mueller <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 11:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-834

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Laura Mueller
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Karl Hjerpe <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 11:26 AM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-835

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Karl Hjerpe
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sheila Schultz <sierra@sierraclub.org>
Sent: Friday, January 23, 2015 11:27 AM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-836

Jan 23, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Local residents will continue to work with IDNR and Lake County to protect the Des Plaines River watershed from pollution.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sheila Schultz
[redacted]

Daniels, Simon

From: HENSON, MARK [AG/1000] <mark.henson@monsanto.com>
Sent: Friday, January 23, 2015 12:00 PM
To: Daniels, Simon
Subject: Public Comments on Illinois Nutrient Loss Reduction Strategy
Attachments: Monsanto Comments on Illinois Nutrient Loss Reduction Strategy.pdf

NCRS
PC-837

Simon:

Please find attached comments from Monsanto on the draft Nutrient Loss Reduction Strategy.

I have requested a delivery receipt and read receipt for this message as confirmation that our letter was indeed received prior to the filing deadline of midnight, January 24, 2015.

Regards,

MARK HENSON, PH.D.
SUSTAINABILITY SCIENCE ENGAGEMENT LEAD
MONSANTO COMPANY
800 NORTH LINDBERGH BLVD., ST. LOUIS, MO 63167
MAIL ZONE : C2NB
314-694-7886 (office) | 314-913-1266 (cell) | mark.henson@monsanto.com

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MONSANTO

MONSANTO COMPANY
800 NORTH LINDBERGH BLVD
ST. LOUIS, MISSOURI 63167
PHONE (314) 694-1000
http://www.monsanto.com

To: Illinois Environmental Protection Agency

From: Mark Henson
Sustainability Science Engagement Lead
mark.henson@monsanto.com
(314) 694-7886

Re: **Comments on the Illinois Nutrient Loss Reduction Strategy**

January 23, 2015

Dear Illinois Environmental Protection Agency staff,

On behalf of the Monsanto Company, I wish to express our strong support for the draft Illinois Nutrient Loss Reduction Strategy (INLRS), prepared jointly by the Illinois Department of Environmental Protection and the Illinois Department of Agriculture, and released for public comment in November 2014.

Illinois is fortunate to have some of the most productive soils in the world, allowing Illinois growers to produce a wide array of crops that supply food, animal feeds, biofuels, and other essential goods to its residents and to people and businesses around the world. While a significant contributor to the economic vitality of Illinois, agriculture is also the source of some of the nutrients that currently impair surface waters and groundwaters in the state.

We are very pleased that individual producers and farmer-led groups in Illinois, including the Illinois Corn Growers Association, the Illinois Soybean Association, the Illinois Pork Producers Association, and Illinois Farm Bureau, took an active role in drafting the INLRS. Their deep involvement in the development of the Strategy demonstrates their ownership of the nutrient issue and their commitment to its prompt and enduring resolution. We also believe that this participative approach to developing the Strategy will carry over to the implementation phase, leading to the most cost-effective means of reducing nutrient loadings in Illinois' rivers and streams. We believe that collaboration among all sources of nutrient loadings is essential, because the estimated costs for achieving the targeted 45% reductions in nitrogen and phosphorus loadings, as reported in the Strategy's Science Assessment, are enormous.

We believe that agriculture can be conducted in Illinois in harmony with the natural environment, and Monsanto has a rich history of providing products and services that enable Illinois farmers to produce crops in a sustainable manner. But our commitment to preserving the environment in Illinois extends beyond our commercial activities. For example, Monsanto is a member of the Illinois Council on Best Management Practices (CBMP), a not-for-profit organization dedicated to protecting the state's natural resources and reducing agriculture's impact on the waters of the state. At present, CBMP is entirely focused on enabling producers to

improve their nutrient use efficiency and reduce nutrient losses to the environment. CBMP achieves this by educating growers on agronomic practices that improve nutrient use efficiency or capture nutrients before they migrate from farms into the environment.

We support the fact that the INLRS allocates the overall nutrient loss reduction targets to point and non-point source categories in direct proportion to their contributions to the total nitrogen and phosphorus loadings in Illinois' rivers and streams. This approach avoids pitting one sector against another, and promotes collaborations between nutrient sources that can reduce the overall cost of achieving the Strategy's nutrient loss reduction goals.

Monsanto is very concerned about calls to regulate nutrient losses from agriculture under the federal Clean Water Act. We believe that regulating non-point source dischargers using existing Clean Water Act mechanisms, such as the National Pollutant Discharge Elimination System, will be extremely expensive and unnecessarily burdensome to agriculture, and will require an unprecedented commitment of human and financial resources on the part of state government for rule development and maintenance, discharge permitting, effluent monitoring, and compliance enforcement. We would prefer to see public resources devoted instead to alternatives and incentives that will drive changes to farming practices that create structural and lasting impact, such as education, outreach to growers on conservation practices, and expanding the infrastructure necessary for rapid deployment of those practices. Areas that might benefit from public support include cover crop seed production and distribution, soil and water testing, remote crop sensing, nutrient fate and transport modeling, variable rate fertilizer application equipment, and enhanced drainage management devices.

We strongly support the Strategy's reliance on the voluntary adoption of best management practices (BMP's) by agricultural producers to reduce nutrient losses from their farms. Because agricultural operations in Illinois are very diverse, with varying crop rotations, tillage practices, soil types, weather patterns, and hydrological conditions from one part of the state to another, it is very unlikely that any one nutrient loss reduction practice will be effective on all Illinois farms. Allowing growers to identify the practices that work best for them creates a "living laboratory" in which many alternative solutions can be evaluated under real-world conditions. This will lead to more robust data sets and continued refinement and optimization of practices across the landscape.

Growers are stewards of the land and environment. Voluntary BMP adoption is more likely to result in improvements that are sustainable in the long-term, because growers will have more ownership for the practices they select than for those they are forced to adopt. In addition, some BMP's have the potential to not only reduce nutrient losses, but also to reduce crop production costs and improve the value of farm land. For example, the fertilizer industry's 4R's program educates farmers on using the right source of fertility in the right amount, at the right time, and in the right place. By managing their fertilizer inputs more carefully, growers can ensure that more of the inputs they buy end up in the crop, and by difference, incur lower nutrient losses to the environment. As another example, some cover crops are able to scavenge nutrients that remain in the soil after cash crops have been harvested. But cover crops have also been shown to reduce soil erosion, and build soil tilth over time, which increases the value of the land and helps mitigate the effects of climate change. Growers are much more likely to implement nutrient loss

reduction practices that save them money and build investment value than ones that add to their operating costs.

In conclusion, we believe that achieving the 45% loading reductions contemplated by the INLRS may take many years to accomplish, and will require virtually every farmer in Illinois to adopt some manner of conservation practice. It is imperative that the public recognizes the magnitude of this challenge, and that an overly proscriptive approach to lowering nutrient losses may make Illinois agriculture uncompetitive in the global marketplace. That outcome would threaten the livelihood of tens of thousands of farm families in Illinois, and would create adverse consequences for all of the citizens of the great state of Illinois.

Sincerely,

Mark Henson
Sustainability Science Engagement Lead

Daniels, Simon

From: Brown, Eliana <brown12@illinois.edu>
Sent: Friday, January 23, 2015 11:18 AM
To: Daniels, Simon
Cc: Miller, Brian Keith; Merrifield, Lisa C; Riley, Anjanette Elizabeth; Willhite, Marcia; Walkenbach, Amy
Subject: Nutrient Loss Reduction Strategy Comments
Attachments: NLRS Comments.docx

Attached please find the Water Center's comments for the Nutrient Loss Reduction Strategy.

Let me know if you have any questions.

NLRS
PC-838

Thanks!
Eliana

C. Eliana Brown
Illinois Water Resources Center
368 NSRC, MC-635
1101 W. Peabody Dr.
Urbana, IL 61801
217-265-0760
http://web.extension.illinois.edu/iwrc/

Illinois Water Resources Center

Nutrient Loss Reduction Strategy Comments

Suggested changes are highlighted in red.

p. 3.28-3.29

In several places, mg/L^{-1}, nitrate-N/L^{-1} and P/L^{-1} are used where mg/L, nitrate-N/L and P/L are intended.

p. 3.28 2nd paragraph

Currently:

1mg

Suggested:

1 mg

p. 3.42 Figure 3.22 caption

Currently:

The blue diamonds indicate individual year loads, and the red line is a polynomial best fit trend line....

Suggested:

The green diamonds indicate individual year loads, and the black line is a polynomial best fit trend line....

p. 5.4 3rd and 5th paragraphs (same text in both)

Currently:

A TMDL, prepared either by Illinois EPA or third parties are expected to be completed in time to set water quality-based effluent limits in the next permit.

Suggested:

A TMDL, prepared either by Illinois EPA or a third party, is expected to be completed in time to set water quality-based effluent limits in the next permit.

p. 5.7 last paragraph

Currently:

Illinois EPA views the 1 mg/L permit limit as a starting point. It is expected that better performance can be achieved over time by encouraging the use of more sustainable technology that will lead to lower discharge levels. The nutrient-related permit conditions in the NPDES permits for the Fox River dischargers establish a 1 mg/L total phosphorus limit. They also require that each determine the actions needed to lower total phosphorus effluent concentrations enough to address dissolved oxygen and algal problems....

Suggested:

Illinois EPA views the 1 mg/L total phosphorus limit as a starting point. It is expected that better performance can be achieved over time by encouraging the use of more sustainable technology that will lead to lower discharge levels. The nutrient-related permit conditions in the NPDES permits for the Fox River dischargers establish a 1 mg/L permit limit. They also require that each permittee determine the

actions needed to lower total phosphorus effluent concentrations enough to address dissolved oxygen and algal problems....

p. 6.2 3rd paragraph

Currently:

Filter strip BMPs on 14,000 acres also account for annual reductions of 330,000 lbs of nitrate-nitrogen, 167,000 lbs of total phosphorus, and 107,000 tons of of sediment.

Suggested:

Filter strip BMPs on 14,000 acres also account for annual reductions of 330,000 lbs of nitrate-nitrogen, 167,000 lbs of total phosphorus, and 107,000 tons of sediment.

p. 6.2 4th paragraph

Currently:

... designed to address stormwater runoff, which can contribute nutrient loading Illinois waters.

Suggested:

... designed to address stormwater runoff, which can contribute to nutrient loading into Illinois waters.

p. 6.8 3rd paragraph

Currently:

KIC, established by the Council on Best Management Practices in January 2012....

Suggested:

KIC, established by the Illinois Council on Best Management Practices (CBMP) in January 2012....

p. 6.11 2nd call out box

Currently:

The goal of the Illinois NLRS is for farmers to select....

Suggested:

The goal of the Illinois Nutrient Loss Reduction Strategy is for farmers to select....

p. 6.17 2nd paragraph

Currently:

Agricultural Water Quality Partnership Forum

An Agricultural Water Quality Partnership Forum will be formed to steer, coordinate, and assign responsibilities for delivering outreach and education required to involve individual farmers in addressing nutrient losses. The partnership will include high-level officials from relevant agencies and organizations. Tasks for this group will include:

- Strengthening connections between industry initiatives, continuing education requirements for certified crop advisors, state programs, and other technical service providers to raise visibility of programs and help producers evaluate and select the most appropriate BMPs

- Identifying necessary education initiatives and assigning their development to the appropriate organization
- Coordinating and align priorities for funding BMP implementation
- Reaching a consensus on whether Illinois should pursue an Ag Water Quality Certification program, either statewide or in pilot areas, that would encourage voluntary adoption of BMPs

Suggested:

Agricultural Water Quality Partnership Forum

An Agricultural Water Quality Partnership Forum will be formed to steer, coordinate, and assign responsibilities for delivering outreach and education required to involve individual farmers in addressing nutrient losses. The partnership will include high-level officials from relevant agencies and organizations. Tasks for this group will include:

- Strengthening connections between industry initiatives, continuing education requirements for certified crop advisors, state programs, and other technical service providers to raise visibility of programs ~~and help producers evaluate and select the most appropriate BMPs~~
- Selecting members for a subgroup to develop products and programs that help producers evaluate and select the most appropriate BMPs and work with the Nutrient Monitoring Council to track and report BMPs necessary for adaptive management.
- Identifying necessary education initiatives and assigning their development to the appropriate organization
- Coordinating and aligning priorities for funding BMP implementation
- Reaching a consensus on whether Illinois should pursue an Ag Water Quality Certification program, either statewide or in pilot areas, that would encourage voluntary adoption of BMPs

p. 7.2 3rd paragraph

Currently:

the MS4 general permit requires permittees....

Suggested:

The MS4 general permit requires permittees....

p. 7.5 2nd paragraph

Currently:

These allow overflows under certain conditions during the planning and implementation of an approved plan to fully eliminate future overflows.

Suggested:

~~These allow overflows under certain conditions during the planning and implementation of an approved plan to fully eliminate future overflows.~~ The long term control plans allow for permitted overflows.

p. 8.2 last paragraph

Currently:

Illinois EPA will convene a Nutrient Science Advisory Committee to guide the development of nutrient criteria that help protect aquatic life in Illinois streams and rivers. It will be comprised of scientific experts nominated by the stakeholder sectors represented in the Illinois Nutrient Loss Reduction Strategy Policy Working Group, and meetings will be open to the stakeholder workgroups. The Nutrient Science Advisory Committee will examine technical issues concerning nutrients and their effects in flowing waters. Their review will include an analysis of the available data, science, research results, and statistical analyses referenced above, the technical basis for numeric nutrient criteria established in other states, the basis for nutrient-related water quality goals developed by watershed groups, U.S. EPA guidance, and any other relevant information.

Suggested:

Illinois EPA will convene a Nutrient Science Advisory Committee with a selection process modelled after the U.S. EPA Science Advisory Board Hypoxia Advisory Panel to guide the development of nutrient criteria that help protect aquatic life in Illinois streams and rivers. It will be comprised of scientific experts nominated by the stakeholder sectors represented in the Illinois Nutrient Loss Reduction Strategy Policy Working Group ~~, and meetings will be open to the stakeholder workgroups~~. The Nutrient Science Advisory Committee will examine technical issues concerning nutrients and their effects in flowing waters. Their review will include an analysis of the available data, science, research results, and statistical analyses referenced above, the technical basis for numeric nutrient criteria established in other states, the basis for nutrient-related water quality goals developed by watershed groups, U.S. EPA guidance, and any other relevant information. Stakeholder input will follow U.S. E.P.A. Science Advisory Board guidelines.

p. 9.1

Delete extra space between 3rd and 4th paragraphs.

p. 9.3 3rd paragraph

Currently:

HUC 8 Watershed Pollutant Export Loadings Network or Export Modeling Efforts Continuous real-time monitoring of nutrients or nutrient export modeling could be conducted at a select group of high-priority eight-digit Hydrologic Unit Code (HUC) watersheds to evaluate the implementation and environmental successes of this strategy.

Suggested:

HUC 8 Watershed Pollutant Export Loadings Network or Export Modeling Efforts
Continuous real-time monitoring of nutrients or nutrient export modeling could be conducted at a select group of high-priority eight-digit Hydrologic Unit Code (HUC) watersheds to evaluate the implementation and environmental successes of this strategy.

p. 9.4 and 9.5

The subtitle "Current Agricultural Programs" should be before "Section 319....."

Currently:

Section 319 Point Source Pollution Grants

Illinois EPA verifies and tracks the implementation of projects funded through Section 319 of the Clean Water Act (33 U.S.C. 1329). Through this grant program, Illinois EPA works with local governments and other organizations to protect water quality through the control of point source pollution.

Suggested:

Section 319 ***Non-point*** *Source Pollution Grants*

Illinois EPA verifies and tracks the implementation of projects funded through Section 319 of the Clean Water Act (33 U.S.C. 1329). Through this grant program, Illinois EPA works with local governments and other organizations to protect water quality through the control of non-point source pollution.

p.9.4

Currently:

Illinois EPA currently tracks the information needed to calculate these measures through its Integrated Compliance Information System database. Information is based on required reports and the coding of new permits into the system. This information will be documented in a biannual report on nutrient strategy implementation.

Suggested:

Illinois EPA currently tracks the information needed to calculate these measures through its Integrated Compliance Information System database. Information is based on required reports and the coding of new permits into the system. This information will be documented in a biannual report on nutrient strategy implementation.

Additional programs are listed in chapter 5.

p. 9.6

Currently:

Several agriculture groups, discussed in chapter 6, are designing and participating in a series of voluntary reporting systems and surveys to track the adoption of nutrient stewardship practices that may reduce nutrient losses. These systems will track:

- The number of acres in a watersheds where nitrogen management systems such as split= nitrogen applications and Maximum Return to Nitrogen rates are used
- Trends in the use of nitrogen stabilizers and urease inhibitors in both fall and spring nitrogen applications
- The number of sites in priority watersheds participating in the N-WATCH soil nitrate testing and tracking system
- Increases in cover crop seed sales and cover crop plantings in priority watersheds
- Increases in post-application nitrogen and strip-till equipment sales

January 23, 2015
Illinois Nutrient Loss Reduction Strategy
Policy Working Group
Public Comments

NLRS
PC-841

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BUREAU OF WATER
BUREAU CHIEF'S OFFICE

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-7027
Simon.Daniels@illinois.gov

Dear Mr. Daniels, and to whom this may concern:

As a concerned citizen of the State of Illinois, I want to share some of my thoughts regarding the Nutrient Loss Reduction Strategy. Employed as a soil scientist, as an agronomist (CCA), and serving as a director on the Stark County Soil & Water Conservation District (SWCD), I have closely watched the development of interest over the past few years in nutrient reduction as a means to improve water quality; both locally and nationally. The idea is noble, and worthy of consideration; of which you have been tasked to do. Thank you for your efforts.

I do have some thoughts that I just want to bring to your attention, if perchance you will consider in future deliberations. If you have already discussed these items, then this comment can serve as reinforcement that they are of primary concern to many of the citizens of Illinois, and of the greater Midwest, as well.

1. Remember 2008, and that caring for ***people*** needs to be of primary concern for any governmental regulation or action; these strategies included.
    a. Global commodity prices sky-rocketed, triggering riots around the world (Haiti and Egypt, especially, come to mind) simply because people were hungry. These people were relying on food and grain imports from the US (including Illinois) to survive, and were suddenly unable to afford that basic necessity.
    b. I urge you to be careful *not* to implement strategies too quickly that would suddenly impact commodity supply or demand, or adversely impact commodity price stability. To do so would be to violate the very essence of governance. Small steps over time is advised, with caution, and with the ability to encourage practices that work while backing off those that do not work, over time.
    c. I see this, not as a problem now, but conceivably in the threats of possible regulatory requirements where a glut of practices must change suddenly. Some of the practices in Appendix B raise a red flag for me, such as eliminating P-applications and reducing N-applications, removing 5% of the land from production for wetland or buffer use, building bioreactors, and taking ground out of grain production to include perennial-crops in the rotations. I see a problem if these become suddenly widely-adopted practices.

2. Cool heads and practical relevance need to dictate any further action regarding nutrient reduction in Illinois.
    a. Understood: environmental welfare impacts the welfare of people for generations to come. Having studied and watched for years the science surrounding the hypoxic zone in the Gulf of Mexico, I am skeptical at best that we (as people) need to be overly concerned about it. Don't get me wrong. A healthy respect for our environment needs to be exercised (hence the need for this nutrient loss reduction strategy), but I feel some of the primary reasons touted for pursuing water quality are skewed from what they *should* be. Namely, the preservation of pure drinking water for people for years to come ought to trump any concern we have for a hypoxic zone that has waxed and waned and been a natural part of the Gulf for generations past. The 2014 Lake Erie debacle is far more important, in my mind, than the Gulf hypoxic zone ever will be.
        i. A note on my skepticism: I see how fertilizer use has DROPPED since 1980 (www.ers.usda.gov/data-products/fertilizer-use-and-price/), but we (as an ag industry) are constantly told that nutrient loss is ESCALATING. Simple math does not add up. So I remain skeptical that fertilizer is the culprit. Still, I am willing to help reduce water pollution where I can.
    b. So my recommendation is, when justifying any kind of regulatory action, be sure to base the rationalization for it upon practical relevance and not upon political, personal, or acutely environmental hype. In so doing, it will be much better received as necessary by the people of the state.
    c. In this Nutrient Loss Reduction Strategy, a clear purpose for the strategy is omitted from the Executive Summary. I highly suggest including justification. Why, for example, is "Nutrient runoff a major threat to water quality in Illinois" (paragraph 2 of Executive Summary)? My take-away from the executive summary is that the only reason this is being done is because the USEPA is demanding response to the Gulf Hypoxic Zone... a justification I think is tainted by hype as explained above. Just including (in the executive summary) the 2-fold goal as stated in the Introduction would help me to think you have my interests in mind (as a governed-citizen of Illinois) as opposed to the hypoxic zone in the Gulf.
        i. The question is pertinent, "Do you have the interests of the people of Illinois in mind?" Maybe so, but you should somehow make that be felt in the summary.
3. Keep it practical.
    a. Some of your ideas I don't consider to be real practical, such as constructing wetlands and bioreactors, and increasing alfalfa production. Not to mention logistics for getting all necessary fertilizer applied when the ground is not froze for the millions of acres north of, say, the I-74 corridor. But, I'm not saying it can't be tried.

Thanks again for your efforts.

Sincerely,
Neil Stoller

[redacted]

c/o Neil Stoller

[redacted]

Akron Services Inc

~~17705 N. Elevator Road~~
~~Edelstein, IL 61526~~

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Bloomington and Normal
Water Reclamation District
P.O. Box 3307, Bloomington, IL 61702-3307 (309) 827-4396

NLRS
PC-842

RECEIVED
JAN 26 2015
BUREAU OF WATER
BUREAU CHIEF'S OFFICE

January 22, 2015

Illinois Environmental Protection Agency, Bureau of Water
1021 North Grand Avenue East
Springfield, IL 62794

RE: Comments regarding the Illinois Nutrient Loss Reduction Strategy

Dear Sirs and Madams:

The Bloomington and Normal Water Reclamation District (BNWRD) is grateful for the opportunity to provide comment on the Illinois Environmental Protection Agency (IEPA) Illinois Nutrient Loss Reduction Strategy (NLRS) draft document. The BNWRD respectfully submits herewith its comments on the document.

The development of this proposed nutrient reduction strategy has been a long, difficult and contentious process. The BNWRD compliments the IEPA for its persistence and its inclusiveness of potential stakeholders in this process. The IEPA, the regulated community and advocacy groups have a long and successful history of dramatically improving the quality of the waters of Illinois since the enactment of the Federal Clean Water Act of 1972. Further, this improvement has been accomplished to date with both a keen stewardship of the State's aquatic resources and the State's financial resources with which this progress has been funded. The BNWRD prefaces its comments on the subject document with the very sincere desire to see this historically effective balance maintained as Illinois addresses this nutrient issue in the midst of the current severe economic climate of the State.

The BNWRD comment will proceed by the Section structure of the NLRS with paragraphs and sentences of Section pages specifically indicated.

We treat water seriously.

EXECUTIVE SUMMARY

The third paragraph of Page e indicates that... "It does not call for new regulations for either point or non-point sources." **Page f states in the first bullet point** that nutrient reduction strategies will be based on the latest science and the best available technology. **The third bullet point of Page f** addresses the creation of a Nutrient Science Advisory Committee (NSAC) that will develop numeric nutrient criteria. **The concluding paragraph** of the Executive Summary addresses cost effective strategies to reduce negative nutrient impacts.

The intent of not enacting a new regulation for nutrient control is quite laudable given the difficulty experienced to date by various research groups throughout the State in attempting to identify nutrient/ecosystem interaction. The proposed NSAC, however, seems to be faced with a very difficult task in the development of numeric nutrient criteria in consideration of the very inconclusiveness of recent research to accomplish just that task.

The BNWRD strongly urges the IEPA to direct the NSAC to develop a very careful approach to establishment and enactment of nutrient criteria. Such an approach could rely on both numeric and non-numeric criteria as may be appropriate for the extensive variation in geographical and demographical characteristics of the State. Such a system of locally or regionally specific criteria seems to be particularly appropriate in response to some of the "latest science and best available technology". In short, enactment of one state-wide nutrient criterion would seem to offer state-wide nutrient reduction to the extent necessary for the areas of the State requiring the most critical regulation at great cost to all. Such a criterion would certainly not result in the "....cost effective strategies...." referenced in the concluding paragraph of the Executive Summary.

INTRODUCTION

The second paragraph, last sentence of Page 1.1: This sentence seems to the BNWRD to require some reconsideration of a statement made in the Executive Summary. The Executive Summary specifically states that the NLRS ".....does not call for new regulations ....." Individuals reading only the Executive Summary of the NLRS (as many people will do since that is the purpose of an Executive Summary) will be led to believe that the nutrient reduction strategy will not require any new regulations and, henceforth, marginal expense. Everyone involved to date with this issue knows that the eventual nutrient reduction efforts will be extremely expensive for both point source and non-point source entities. The Executive Summary is conflicting in this regard. Mention should be made in the Executive Summary that new regulations, and thus significant expense, will result from new discharge limits and the enactment of the criteria developed by the NSAC. Significant costs would also be incurred for POTW's receiving technology based total phosphorus limits with existing plant process

infrastructure not designed to achieve such a treatment requirement. Transparency and appropriate financial stewardship requires this advisement.

Pages 1.1 and 1.2, Gulf Hypoxia Action Plan 2008: This section of the NLRS presents the Gulf of Mexico Action Plan goals; the uncertainty of quantifiable nutrient reduction needs to meet those goals and recognition of the inability to proceed by schedule in both issues due to their inherent difficulty. The Gulf of Mexico hypoxic zone has been the subject of investigation and measurement for many years and remains a controversial issue. Development of IEPA nutrient criteria began well over fifteen years ago and considerable uncertainty as to actual need still exists.

The State of Illinois and locally, BNWRD, are responsible for stewardship of not only State water resources but also State and community financial resources. The inability to objectively identify and define the extent of nutrient impact on either Illinois waterways or the Gulf of Mexico in no way diminishes the need for attempting to address such problems. However, implementation of stringent nutrient water quality standards and subsequent NPDES permit limits without awareness of the necessary level of protection is capricious and potentially very wasteful of financial resources. The BNWRD respectfully requests that the final IEPA nutrient reduction strategy allow development of pathways for nutrient control that can be implemented in a gradual manner so as to allow a measurement of any gains achieved, contain mechanisms for modifying such requirements as may be scientifically found appropriate and concurrently allow time for additional research to further identify the specific needs of both the waters of Illinois and the Gulf of Mexico.

Page 1.6, Point Source through Total Maximum Daily Load Sections: The BNWRD believes these paragraphs present one of the currently most contentious aspects of the Illinois nutrient control strategy. Specifically, there has been determined no objectively quantifiable level to which nutrients must be reduced in any stream in Illinois to alleviate any alleged impairment. As mentioned in the following sections of the NLRS, a state-wide concentration limit of phosphorus protective of the waters of the State almost certainly cannot be determined. As the IEPA is aware, this lack of a specific concentration follows significant research effort funded at a significant cost. Nutrients continue to be referenced as a leading cause of impairment on 303(d) lists in the *absence* of a numeric water quality standard for either phosphorus or nitrogen for which a definitive concentration is established as harmful to aquatic life.

The BNWRD assumes that the IEPA is presenting these paragraphs to illustrate a potential avenue of nutrient control (the TMDL) available on a nutrient impaired waterbody. If such is the intent, a clarifying statement should be made with particular reference to the last sentence of the TMDL paragraph such as: to paraphrase, point sources can be forced by regulation to reduce nutrient discharge, but non-point sources cannot be so regulated. Nutrient non-point sources are

given goals for nutrient reduction, not mandated standards as are point sources. If point sources are the cause of impairment, TMDLs are effective. However, TMDLs are viewed as non-binding and merely educational for situations where the source of impairment is non-point sources.

BNWRD believes this section is misleading as presented in consideration of the information contained in the Goals and Milestones section found next in this report. In that section it is revealed that point sources contribute 48% and non-point sources contribute 52% of the phosphorus load discharged to Illinois streams. Fifty two percent of the phosphorus load discharged to the waters of Illinois cannot be regulated, but the point sources contributing 48% can be regulated. This is a situation which must be addressed.

An alternative to non-point source permit regulation could be the approval of best management practice programs without numeric NPDES regulation for point source discharges. These practices would, by necessity of physical location, be very site specific. Partnerships among point sources and agricultural interests addressing important nutrient control mechanisms within a watershed could be developed. Among others, such mechanisms could include efforts to address all forms of soil erosion, creation of potential nutrient sinks to sequester nutrients from both point source and non-point source origins, and development of watershed monitoring and assessment strategies to monitor program effectiveness.

Such partnerships could be quite analogous to the current DuPage River Salt Creek Workgroup. However, this group is located in northeastern Illinois where point source discharges are quite spatially dense. The BNWRD envisions a program more suited to downstate Illinois where point source density is much less than in northeast Illinois. In such downstate areas, a point source discharger could cooperate with agricultural interests within a given watershed, or portion thereof, to develop a mutually funded and enacted comprehensive nutrient control strategy for the specific area of concern.

NPDES point source regulation could be initiated through the IEPA's endorsement for the discharger to cooperate with non-point source dischargers in development, funding and enactment of the control strategy. A narrative NPDES nutrient regulation could be incorporated into the point source discharge permit. Such a regulation would be in keeping with the narrative nutrient water quality standard. Non-point source involvement could be mandated as an eligibility requirement for participation in various federal and state agricultural support programs. Such an arrangement would not only provide a great deal of flexibility and site specific response to nutrient control needs, but would also forge a legally binding coalition among all interests within a specific watershed area. The BNWRD sees the cooperative effort of point source and non-point source interests as absolutely essential in addressing the nutrient control strategy yet to be determined.

GOALS AND MILESTONES

The BNWRD commends the IEPA for recognition of the three sources of nutrient input indicated in this section and the subsequent intent to have each of the three sources reduce its contribution. It is possible the targeted phosphorus load reduction could be achieved by solely regulating point sources or by agricultural non-point sources. The BNWRD however, strongly encourages the IEPA to pursue the development of partnerships among point source and agricultural dischargers within targeted rural drainage basins where nutrient impairments must be addressed. Urban densities in certain watersheds make such arrangements infeasible due to the proximity of point source outfalls. As discussed in the previous paragraph, in many downstate areas of Illinois sufficient spatial opportunity exists for point sources and the agriculture community to cost share and jointly undertake best management practices.

Page 2.1, Third Paragraph: The BNWRD has concern about the statement made in this paragraph: "...once the hypoxia related target reduction for total phosphorus from point sources is achieved, point sources will not be obligated to reduce further to address loading to the Mississippi River." As required by the Clean Water Act of 1972, states adopt water quality standards to protect the uses designated for the waters in their jurisdiction. To our best knowledge, states do not have the framework to adopt standards solely for the protection of the Gulf of Mexico. The primary driver for further implementation of nutrient limits imposed on point sources should be based on the premise of meeting local water quality needs. POTW's discharging to streams not impaired for nutrients merit consideration for not imposing such limits

SCIENCE ASSESSMENT

Dr. Mark David *et al* are commended for their assessment of the current status of nutrient dynamics and impairments of Illinois waters. Their assessment is quite circumspect and addresses all recognized areas of concern. The impact and subsequent need for control of nitrogen is conclusively presented by the authors. However, their assessment also reveals the lack of the true understanding of the impact of phosphorus on Illinois streams and rivers.

Page 3.2 Current Conditions: The BNWRD respectfully requests an explanation of the specific shortcomings of the Integrated Compliance Information System (ICIS) attributable to the lack of the system applicability in determining phosphorus loadings to the waters of Illinois. This system was developed by the USEPA at great expense to facilitate just the type of data acquisition and analysis required by Mr. Mosher in his phosphorus analysis. It has been

suggested that some of the ICIS data may be inaccurate, if so, a re-evaluation of the proposed necessary percentage reduction may well be warranted.

Page 3.3 Text: The lack of appropriate data in the ICIS again complicates the issue of point source discharge loading. The authors have pursued the most logical course available in an attempt to quantify nitrogen loadings, but again the best alternative simply results in a broad estimate. The BNWRD is aware that the IEPA has been requiring both phosphorus and nitrogen monitoring of point source discharges through the NPDES permit process to a limited degree. The suggestion is respectfully made that perhaps a few years of state-wide effluent nutrient analysis might be productive. Such analyses could be targeted at the specific requirements for development of accurate point source discharge loadings. The tremendous potential cost to the residents of Illinois for nutrient reduction would certainly seem to justify such data acquisition. Attempts to avoid unnecessary capital costs are particularly relevant at this time in consideration of the sluggish economy of Illinois and the extreme financial crisis of Illinois State Government.

Page 3.4, Urban Runoff Nutrient Loads: BNWRD commends the authors for the work of this section. Their approach was straightforward and the availability of State of Illinois land cover data was convenient. The only regrettable aspect of this section is the dated nature of the land cover documents, specifically 1996 and 2000. These documents are nineteen and fifteen years old respectively. The BNWRD suspects that considerable real estate development and subsequent land cover change has occurred throughout the State since publication of these data. This change is expected to be most significant in the highly urbanized northeast section of the State. A comparison of the areas of development along IL Route 47 as well as along Interstate-55 between Interstate 80 and Bolingbrook, IL between 2000 and the present would reveal a significant increase in urban development. Such development is to be found throughout the State. Urban non-point source nutrient release might be of a significantly higher amount than the authors calculated using the dated land cover reference sources.

Page 3.8, Last Paragraph: In this paragraph the authors discuss nutrient dynamics as correlated with hydraulic flow. The BNWRD acknowledges that both TP and DRP should increase in mass as flow rates increase. Such an increase is recognized as a function of erosion with mechanical transport of soil particles containing phosphorus. The R^2 values obtained by the linear regression analysis comparing TP and DRP with water flux and year are extraordinary. The R^2 values of .97 and .96 for TP and DRP respectively are quite noteworthy for *in vivo* data. Such high correlations are generally experienced with empirical or theoretical analyses. The BNWRD would respectfully request the authors' comments on such correlation. Specifically, could it result from extensive data modification/manipulation and thus be indicating the effectiveness of a data interpolation process or do the authors feel it is indicative of the actual field data as collected? The BNWRD sincerely compliments the authors if they are convinced of the latter. If

so, they have indeed established a virtually irrefutable association between hydraulically induced soil erosion and riverine phosphorus load.

Page 3.15, Top of Page: This discussion about the three HUC8s in northeastern Illinois is quite confusing. Why is the measured point source nutrient load not reflected by the measured river nutrient load? Are nutrients being assimilated by in-stream processes or are the stream data incomplete and/or spurious? Neglecting urban non-point source contributions of nutrients to the stream load in these HUC8s seems inappropriate given the extensive and broad spectrum of human activity in occurrence. This enigma is particularly troubling given the R^2 values given in the preceding paragraph addressing stream hydraulics and nutrient load.

The BNWRD respectfully suggests that in lieu of the potentially great nutrient input of this area, either the data be re-evaluated or additional monitoring be undertaken in an effort to understand the dynamics actually at work in this area.

Page 3.18, End of Paragraph: The BNWRD is appreciative of the motivating concern to address nutrients as a factor of impairment of the waters of Illinois. Dr. David *et al* have done an excellent job in attempting to gather, analyze and present the body of nutrient-related knowledge extant in a meaningful manner such that appropriate action may be taken regarding the presumed nutrient impairment.

The statement (not a statement of the authors of this section) is made on **Page 5.7** of this document that "The intent is that total phosphorus be determined as a cause of aquatic life use impairment, establishing a clearer basis to regulate point sources that contribute total phosphorus to the impaired stream segments". The BNWRD refers to the last sentence of the text (a statement of the authors of this section) on **Page 3.18**: "Total phosphorus yield by HUC8 was not statistically correlated with impaired stream miles or lake acres." The inconsistency of these two statements is troubling to the BNWRD.

The statement referenced above from Page 5.7, is a poorly written justification for development of a new, revised or strengthened version of the existing, narrative water quality standard addressing excessive algal growth as a function of phosphorus availability. This statement, in combination with that of Page 3.18, is perhaps an unfair effort to implicate point source discharges as responsible for stream impairment via phosphorus release. This conclusion is drawn with respect to the finding by the authors of the Science Assessment section of this very same document that there exists no correlation of phosphorus yields in the "...4,070 stream miles on the 303(d) list, 4,346 stream miles on the 305(b) ,and 127,270 lake acres on the 305(b) assessment." The authors did, however, find a correlation of impairment by nitrogen on the 4,346 stream miles and 127,270 lake acres of the 305(b) assessment. This correlation was negative (significance $p=0.002$ and $p=0.011$ respectively). The authors of this Science Assessment make the statement regarding these correlations "...suggesting that the greater the

nitrate-nitrogen yield from non-point sources the fewer impaired stream miles or lake acres." This statement is correct for the statistical analysis the authors performed, however, we find it difficult to understand.

The BNWRD will not assume the position that nutrient release to the waters of Illinois has no deleterious effect on aquatic ecosystems as would be implied by the negative correlation mentioned in above paragraph. Such a statement would be irrational and indefensible. However, the BNWRD feels that the inconsistencies of the data analysis discussed in the preceding paragraph undeniably point to the need for a much more circumspect approach to assessing the mechanisms and extent of nutrient-induced impairment of the waters of Illinois. Such an approach must not prejudge what the answer will be.

To date, no scientific data-based quantity for prevention of either nitrogen or phosphorus impairment has been determined for Illinois streams and rivers. In place of the technical conclusions of germane and adequate research, NPDES limits have been imposed through consideration of the level of phosphorus removal that is achievable. In our opinion, achievable level has been determined in an arbitrary way and there has been no showing that imposing requirement will actually yield substantial improvement of the biological health of Illinois waters. Given the dire financial state of the current Illinois economy and the virtual insolvency of the Illinois state government, a better approach to nutrient control in Illinois can and should be developed that shows financial responsibility and stewardship.

Page 3.28, Last Paragraph:

The BNWRD has commended Dr. David *et al* on their analysis of the nutrient control issue to this point in the draft NLRS. However, the BNWRD must respectfully take issue with a few considerations in this sub-section on Point Source Reductions and Cost Estimates. The tremendous capital cost and process reconfiguration required for installation of nutrient reduction technologies in wastewater treatment facilities cannot be summarized in one and one half pages of text in the NLRS. The BNWRD doubts that even a reasonably accurate order of magnitude estimate of capital and operating costs can be meaningfully presented in such a limited amount of text.

The 2008 USEPA documented referenced in this section presented costs from a total of eight wastewater treatment plants in the United States and Canada. A total of eight treatment plants cannot accurately include all combinations of wastewater characteristics, climate considerations, secondary processes in use, spatial availabilities and/or constraints, etc. Deriving accurate cost per pound of nutrient to be removed figures is very challenging given the dynamic nature of the wastewater treatment process as well as the unique characteristics of each community's service area. The list of such important factors to the ultimate capital and operating cost of nutrient removal processes includes many more considerations than BNWRD chooses to mention here.

The statement is made toward the bottom of Page 3.28 that the amount of nitrogen and phosphorus removed had to be estimated by the authors in the two references which address the nutrient reduction strategies of Minnesota and Iowa. The BNWRD includes Page 5-41, Minnesota Nutrient Reduction Strategy (2013) (MNRS) as Appendix A to this comment. This page includes a table which presents the annual cost for phosphorus removal by both populations served and treatment plant daily flow. Appendix A also includes cost per pound of total phosphorus to be removed. The BNWRD operates two treatment facilities. One facility has a Design Average Flow (DAF) of 22.5 MGD. The second facility has a DAF of 7.5 MGD. Based upon the cost per pound of phosphorus to be removed in Appendix A taken from the 2013 MNRS, the annual cost to BNWRD for phosphorus removal from the larger facility will be roughly $4,618,523 ($39/lb. of TP removed x [current lbs discharged-future lbs discharged with concentration of 0.7mg/L]). This compares to the range of annual cost figures of $1,446,127 and $4,052,244 from the chart in Appendix A. For the second BNWRD treatment facility the annual cost for phosphorus removal using the cost per pound of phosphorus to be removed in Appendix A, the annual cost to the BNWRD will be roughly $2,278,552 ($39/lb. of TP removed x [current lbs discharged-future lbs discharged with concentration of 0.7 mg/L]). Based on the range of annual cost figures from the chart in Appendix A the annual cost will be somewhere between $2,059,766 and $2,869,941.

Appendix B contains Table 3.2 from the 2014 Iowa Nutrient Reduction Strategy (INRS). This table presents the costs of implementation and operation of nutrient reduction processes as determined by the State of Iowa. The table allows for a more specific determination of costs than does the Minnesota document due to the evaluation of three specific secondary treatment types. These processes are: activated sludge, fixed film and aerated lagoons. The BNWRD has both the fixed film and the activated sludge processes. However, while the MNRS gave individual costs for phosphorus reduction, the INRS combines the costs for removal of the two nutrients.

Cost estimates for the two BNWRD facilities were compiled using estimates based upon the treatment costs indicated in the INRS. Appendix B of this submittal uses the data presented in the INRS Table 3.2 (Appendix B) to calculated capital and O&M costs for the BNWRD facilities. The BNWRD 22.5 MGD treatment facility referenced above consists of a 13.2 MGD fixed film treatment plant and a 9.3 MGD activated sludge treatment plant. As shown by Appendix B capital costs for both plants total $62,277,000 and O&M costs for both plants total $1,347,900.

The 7.5 MGD facility referenced above is predicted by Appendix B to require $4,875,000 in capital improvements and an additional annual O&M cost of $352,000 per year. Therefore, the BNWRD would experience totals of $67,152,000 for capital improvement and a $1,699,900 increase in the annual O&M budget to reduce TP discharges to 1.0 mg/l and TN to 10.0 mg/l.

The MNRS annual costs did not separate the capital cost of phosphorus removal from the O&M costs. Procedures within the document or its references did not present financial methodologies. Consequently, comparison of the INRS with the MNRS is thus difficult. However, if the BNWRD total capital cost is simply divided by 20 to reflect the predicted life of the processes (as opposed to a present worth analysis), an annual cost of $3,357,600 results. Combined with the $1,850,000 O&M budget derived from the INRS Table 3.2, the total cost is $5,057,500. This amount compares to the $6,897,075 cost predicted by the MNRS.

These financial projections, the cost comparison thereof and the subsequent discussion have not been made by BNWRD to necessarily object to the tremendous cost of nutrient removal or to take issue with the cost estimates provided by Dr. David *et al.* Instead, BNWRD is compelled to comment on the extraordinary cost associated with this issue in consideration of the fact that there exists no quantifiable justification for such treatment goals, and associated expense. This fiduciary concern is heightened by the fact that such justification does not exist at the end of the fifteen years of research and discussion this issue has experienced to date in Illinois. The approximate $67 million capital and an *additional* annual cost of $1.7 million associated with nutrient reduction given above will necessitate either voter approval of a multiple bond issues and/or an increase in the BNWRD user fee for repayment of an Illinois Revolving Loan. The latter assumes, of course, the State of Illinois has the financial ability to sufficiently capitalize the Revolving Loan Program to fund these nutrient reduction needs statewide.

Page 3.43, 2nd to last paragraph: The concluding sentences of this paragraph indicating the highly variable effectiveness of riparian buffers are of concern. Riparian buffers have long been held to be an effective runoff control mechanism. It appears more investigation is warranted if the INRS shows that established riparian buffers result in a 10% increase to a 98% decrease in phosphorus runoff. The authors' response to this situation that their "assumed estimated reductions were based on professional judgment informed by empirical results published in relevant literature" is vague. This statement casts doubt on the calculated reductions obtained by the authors.

Page 3.46, last paragraph: A reduction of yield most certainly will be an extra cost which should definitely be included in the cost analysis of any scenario evaluated. Yield, as a function of fertilizer application, inevitably becomes asymptotic. However, an injustice is done to agricultural non-point sources if this consideration is not investigated.

Page 3.51, last paragraph: The BNWRD commends Dr. David *et al* for their honesty in the concluding section to the Science Assessment portion of this document. Their concern echoes that of BNWRD in that so many unknowns exist regarding necessary nutrient control at this time. The authors and the BNWRD both maintain that much more needs to be learned before intelligent and cost-effective decisions can be made.

WATERSHED PRIORITIZATION

Page 4.1 Prioritization Process: The BNWRD lauds the USEPA's recommendation for including watershed prioritization as a recommended element of the States NLRS. However, NPDES permit cycles have the greatest impact on timing and subsequent prioritization. Also, watershed rankings are based solely on mass transport of nutrient losses. Integration of biological indicators, for example fish survey data, would further improve the prioritization of watersheds in the continued pursuit of improving local water quality, one of the two goals of the Strategy.

NUTRIENT LOSS REDUCTION STRATEGY FOR POINT SOURCES

Page 5.7, 2nd paragraph: The BNWRD has previously commented on the fact that the last sentence in this paragraph prejudges the answer, and is inconsistent with other statements in the report. Royer *et al* (2008) conducted and published a study on the "*Assessment of Chlorophyll-α as a Criterion for Establishing Nutrient Standards in the Streams and Rivers of Illinois*" and found no strong relationship in Illinois between nutrients (TP) and *Chlorophyll-α*. Additionally it was found that nitrogen or phosphorus may not be the limiting factor for algal growth in Illinois due to the effects of other factors including substrate conditions and turbidity. The BNWRD chooses to encourage IEPA to determine the circumstances in which phosphorus causes an aquatic impairment. Such a qualification regarding the impact of phosphorus will have much benefit.

Page 5.7, Local Water Quality Impairments: The BNWRD questions the empowering authority and political direction by which a scientifically unjustifiable NPDES permit limit of 1.0 mg/L can be set for TP with the intention of rescinding and replacing that very NPDES permit limit at a later date with a more restrictive limit. This philosophy is particularly disturbing in consideration of the fact that the only changing dynamic in this situation is the increased aptitude gained by the discharger in operating phosphorus reduction processes. NPDES permit standards are developed to protect local water quality. The BNWRD is respectfully requesting nutrient control mechanisms allow for monitoring gains or improvements of waters of the state such that specific ecological needs can be scientifically assessed prior to any further strengthening of concentration limits.

Page 5.8, Nutrient Loss Reduction Feasibility Plan: Sludge disposal planning was overlooked as a required element for these feasibility plans. Depending on technology or treatment methods selected for nutrient removal, increases in sludge production and phosphorus content within this

treatment plant byproduct are inevitable. Evaluation of this situation as it relates to the impact on sludge disposal operational costs for major POTW's and continued adherence with federal sludge disposal regulations should be considered within the feasibility plans.

Page 5.9, Assuring Adequate Funding: Assigning a high priority in the Revolving Loan Fund to capital improvements required by nutrient reduction mandates is a wise and necessary thing to do. However, the BNWRD remains extremely concerned that there will be adequate capitalization of the Loan Fund over the relatively brief time these nutrient reduction projects will be mandated. The finances of Illinois government are in woeful condition at this time. There is much speculation that the State's finances will not improve without draconian cuts to State expenditures. How does the IEPA plan to assure that there will be adequate capitalization of the Revolving Loan Fund? Obtaining the necessary appropriations for the Loan Fund to implement a nutrient reduction program not based on a defined ecological need may be difficult.

Will NPDES permit limits only be imposed when Revolving Loan Funds are available? If not, will Illinois municipalities be required to fund the necessary capital expenditures themselves? Please remember the INRS capital cost projection in Appendix C for both BNWRD facilities of $67,152,000. Will the taxpayers of Bloomington, Normal, Downs, and a portion of rural McLean County, Illinois be required to let a bond issue for that amount to comply with an unjustified NPDES permit limit? The BNWRD believes these are questions that must be politically and financially addressed before efforts in nutrient reduction proceed much further.

CURRENT PROGRAMS AND PROJECTS SUPPORTING NUTRIENT REDUCTION GOALS

Page 6.18, Last paragraph: The BNWRD urges IEPA to further develop and expand the intent of this paragraph. As stated several times previously in this comment, BNWRD is very interested in exploring rural-urban partnerships in the portions of Illinois where spatial considerations would allow such opportunities among point source and agricultural non-point sources. The BNWRD envisions one potential of such a partnership consisting of non-point source dischargers downstream of point source outfalls undertaking nutrient control BMP's with the point sources partially funding such BMP's in lieu of significant effluent TP reduction. A riparian corridor downstream of such point source discharges could be established to assimilate or retain an amount of TP mass equivalent to whatever is determined to be necessary for a particular watershed.

Such a partnership is seen to offer the many environmental benefits mentioned in this referenced paragraph to a much greater extent than would be possible solely through existing State and/or Federal programs. If funding is available, the BNWRD encourages the IEPA to explore the

potential for use of the State Revolving Loan program. Such an inclusion would result in much greater riparian corridor management opportunity than is now possible.

NUTRIENT LOSS REDUCTION STRATEGY FOR URBAN NON-POINT SOURCES

Page 7.5, last paragraph: BNWRD believes that any authorization of county government to collect stormwater utility fees must be qualified with the caveat that such fees are not assessable within municipalities which have already set a stormwater utility fee. BNWRD recognizes that some ability must exist to procure funding for stormwater projects located beyond the limits of any municipality, but BNWRD does not support municipal residents being assessed two simultaneous stormwater utility fees.

NUMERIC NUTRIENT CRITERIA

Page 8.1, 2nd to last paragraph: BNWRD supports the identification of low phosphorus streams worthy of vigorous protection. However, such designation must be implemented through stringent criteria which precisely and specifically defines such waters. This special protection should not be extended to waters that long ago were physically degraded and are in no way worthy of such rating.

Page 8.1, last paragraph: The fourth line of this paragraph states: "...harmful to aquatic life and **that may** be shown..." The use of the words "that may" in this context is inappropriate. BNWRD fears the indefinite implication of "that may" will facilitate cursory assessments of a given situation with the rather easy final determination that excessive plant growth may have contributed to the problem. Root cause determination of water quality problems is absolutely necessary.

Page 8.2, 2nd to last paragraph: The BNWRD congratulates the IEPA on an excellent summary of the current water quality dilemma in Illinois as expressed in this paragraph. The BNWRD quotes: **"The complex relationship between nutrients and water quality, coupled with the degraded conditions of Illinois waterbodies makes it difficult to determine the direct cause and effect relationship between nutrient levels in water and impairments."**

However, given that statement, the BNWRD then finds it difficult to understand why will the taxpayers of Bloomington, Normal, Downs and a portion of rural McLean County, Illinois will be required to spend approximately $67,152,000 INRS(2014)(Appendix B) on nutrient removal wastewater treatment facilities and approximately $1,699,900 annually for the O&M of those treatment facilities?

The BNWRD respectfully suggests that more progress could be made in the quality of Illinois waters if the vast sums of money about to be spent on nutrient reduction processes were instead

spent on waterway channel and habitat restoration, erosion control and conclusive research leading ultimately to a solid understanding of nutrient and aquatic dynamics.

We hope the IEPA strongly considers these comments as the strategy is revised and finalized. We are very appreciative of the opportunity to provide input on the draft strategy. On behalf of the Board of Trustees of the Bloomington and Normal Water Reclamation District and myself this document is respectfully submitted.

Sincerely,

Randall M. Stein
Executive Director

Appendix A. Minnesota Nutrient Reduction Strategy, page 5-41 (2013)

5.6 Cost Analysis

An analysis of costs is provided below for both wastewater nutrient removal and agricultural BMP implementation. Costs are not presented for nitrogen removal costs in wastewater due to limited data. Literature sources were used for the agricultural BMP costs, which are documented in Section 5.3.

5.6.1 Wastewater Treatment

Costs for the vast majority (over 90 percent) of residents receiving municipal wastewater treatment range from $7 to $11 per pound of phosphorus removed to reach 1 mg/L concentration phosphorus in the effluent. However, removal costs escalate sharply with declining effluent concentration targets. Costs range from $39 to $175 per pound for removal to a 0.8 mg/L concentration and $91 to $344 per pound for removal to a 0.1 mg/L concentration. Table 5-16 presents the annual removal costs to treat wastewater (assumed influent concentrations of 4.5 mg/L) to 1.0 mg/L, 0.8 mg/L, and 0.1 mg/L effluent concentrations. These phosphorus removal cost estimates represent chemical phosphorus treatment by mechanical municipal wastewater treatment facilities only. Stabilization pond and industrial WWTP phosphorus removal costs are not included in these estimates.

Table 5-16. Summary of wastewater annual removal costs for phosphorus (MPCA calculations derived from Thorson 2011).

Design flow (mgd)	Population [a] (pop)	Annual removal cost to 1.0 mg/L [b] ($/year)	Annual removal cost to 0.8 mg/L [c] ($/year)	Annual removal cost to 0.1 mg/L [a] ($/year)
0.20 - 0.49	120,386	$3,575,501	$5,086,379	$13,660,247
0.50 - 0.99	194,117	$3,104,411	$4,665,486	$14,351,246
1.00 - 4.99	432,637	$5,436,306	$9,758,993	$25,349,659
5.00 - 9.99	225,393	$2,059,766	$2,869,941	$7,003,206
10.00 - 19.99	180,851	$1,446,127	$2,085,178	$4,900,305
20.00 - 39.99	506,769	$4,052,244	$5,812,076	$13,916,565
40.00 - 99.99	386,265	$3,529,904	$4,847,735	$12,178,169
100+	1,800,000	$14,393,224	$17,902,429	$37,861,033
	Total	**$37,597,483**	**$53,028,216**	**$129,220,430**

a. Population data derived from 2010 census; assumed flows of 100 gallons/capita/day.
b. Includes both capital and operations and maintenance costs.
c. Does not assume any additional capital costs.

Appendix B Iowa Nutrient Reduction Strategy, page 9 (2014)

Section 3.2 - Cost Estimates

Estimated Costs for BNR Improvements for Muncipal Majors (Target Effluent TN = 10 mg/L, Target Effluent TP = 1 mg/L)										
Treatment Type	# of Facilities	Combined Design AWW Flow (MGD)	Combined Annual Average Flow[1] (MGD)	Total Capital Cost ($M)	Total Annual O&M Cost ($M)	Total Present Worth Cost ($M)[2]	Total Annual Cost ($M)	$/1,000 gallons Treated[3]	Weighted Monthly Cost/Household[4]	Weighted % of MHI[4]
Activated Sludge	56	533	355	348	25	686	51	0.39	7.75	0.18%
Fixed Film	37	101	67	430	7	524	39	1.59	25.83	0.73%
Aerated Lagoon	9	11	8	110	3	147	11	3.92	85.16	2.13%
Totals	102	645	430	887	35	1,358	101	0.64	11.85[5]	0.29%[5]

1. Average annual flow estimated as 2/3 of design AWW flow.
2. Present worth values calculated using discount rate of 4.125% and a 20-year design life.
3. Based on annual average flow.
4. % of MHI for BNR improvements only. Estimates weighted by number of households.
5. Aggregate value weighted by number of households.

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David A. Kovacic
[redacted]

1-24-2015

Dear Mr. Daniels,

I submitted a copy of my comments via e-mail yesterday (1-23-15) but found several typographical errors, so I am sending a hard copy with a disk containing a digital copy with corrections.

While yesterday's version (1-23-15) will suffice, this is a corrected version (1-24-15).

Thank you.

Best regards,

David A. Kovacic

REVIEW of the ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY: draft for public comment – David A. Kovacic 1/23/2015

The Illinois Nutrient Loss Reduction Strategy is an important first step in achieving the goals set forth by U.S. EPA 2008 Gulf Hypoxia Action Plan to reduce point and non-point sources inputs of nitrogen and phosphorus to the Mississippi River. The strategies used must be reliable and cost effective not just initially, but over the long term. Those strategies set into place to mitigate water quality problems will be required in perpetuity. Of course, as a living document, plans can incorporate advances in technology which provide better strategies in the future. However, it is critical that initial strategies are correct so that the benefits reflect the costs and Illinois does not follow a trajectory of failure from which the state cannot recover.

It is with these concerns that I have reviewed the current NLRS draft of November 20, 2014. I focus on strategies that reduce agricultural nitrogen loading to surface waters. Agricultural nitrogen loading accounts for 82% of all nitrogen entering the Mississippi River. This review considers the strengths and weaknesses in the report's strategies to reduce agricultural nonpoint source loading.

Strengths of the 11-20-14 NLRS draft

N and P loading. The plan provides reliable statewide estimates of N and P loading and sources which are a critical part of the nutrient reduction strategy.

Maximum return to nitrogen. The plan calls for an across-the-board change in fertilizer management using Maximum Return to Nitrogen (MRTN) calculator (Iowa State University, 2013), to optimize farm profits while reducing N application. This is a good, common sense approach which increases income by reducing work and fertilizer costs.

Spring fertilizer application. The plan calls for an across the board change in application timing with all fertilizer applied in the spring or during the growing season. This will reduce nitrate losses following nitrification of fall applied anhydrous ammonia, it will also reduce fertilizer requirements because runoff losses will be less. It may, however, increase costs of equipment and time requirements, but overall, as with MRTN, it is a relatively "easy fix."

Water table management. Water table management (WTM) is rejected as a nutrient management strategy because results are questionable. There is reason to believe that nutrient laden subsurface water will bypass the WTM structures rendering the approach ineffective.

Weaknesses of the 11-20-14 NLRS draft

Cover crops. After MRTN and spring fertilizer application, cover crops are the third major across-the-board in-field management change suggested. Optimum establishment of cover crops can work well to reduce N losses by retaining excess end of season available soil N. However, with cover crops the farmer is relying on optimum cover crop growth under non-ideal conditions (Christianson et al. 2013b). In addition, herbicides are often required to kill cover crops before planting and a corn yield reduction of up to 6% can occur. Added to this is the annual cost of planting and spraying which ranges from $59 - $115 per ha ($ 24 - $47 per acre) (Christianson et al. 2013b). Overall there is considerable annual investment required in the use of cover crops with a low chance that the approach will be successful.

The NLRS reports the costs of cover crops to be $3.21 per lb of nitrogen (N) removed, with an EAC of $29 per acre. This is an extremely low estimate when compared to the Christianson et al. (2013b) cover crop EAC estimates which ranged from $164 - $221 per ha per year ($66 - $89 per acre per year). It is also an extremely low estimate when compared to the Iowa Nutrient Reduction Strategy (NRS) (2013) EAC for cover crops which ranged from $40.5 to $80.5 per acre. Christianson et al. (2013b) found this to be the most expensive approach at an N removal cost of $55 per kg of N ($25 per lb of N). This was also one of the most expensive removal costs reported by the Iowa NRS ($5.96 per lb of N).

I question how there can be such disparity in the 11-20-14 NLRS versus the Christianson and Iowa NRS cover crop cost estimates. Because of large cost uncertainty and yield impact variability, the practice of utilizing cover crops is primarily implemented for reasons other than N reduction (Christianson et al. 2013b). As a result, the costs of using cover crops for nitrogen management may far outweigh the benefits.

Buffer strips. Buffer strips have been shown to be highly effective in reducing subsurface N loading and surface P runoff to streams (Osborne and Kovacic, 1993). However, in tile-drained areas, these have been shown to be ineffective because buffer strip N removal is short-circuited by the tile drains which deliver a majority of the subsurface drainage water and nearly all the nitrate-nitrogen to surface waters. Illinois agriculture contributes 80% of the state's annual nitrate load to the Mississippi River as nonpoint source nitrogen, most of which enters surface waters through tile drainage (David et al., 1997). An estimated 48% of total P results from nonpoint source agricultural P and another 48% results from municipal point source P. While riparian buffer strips may be effective in reducing P in surface runoff, the U.S. EPA has recognized nitrate-nitrogen as the primary nutrient leading to formation of the Gulf hypoxic zone (U.S.EPA, 2007).

As far as N removal, it would make sense for the 11-20-14 NLRS to focus on the major source of nitrate loading to streams (tile drainage). Placing buffers on all agricultural streams in the state would seem to divert the focus from nitrate removal. Because buffers in tile drained areas are not effective in removing nitrate-nitrogen, a much better strategy would be to focus limited resources on strategies that are effective (wetlands and bioreactors).

Point source pollution is more readily dealt with since it is leaving a confined source. Therefore the reduction of P loading should focus mainly on point sources with non-point source P reduction being secondary.

The rationale for the use of buffer strips in tile-drained regions is poorly supported with research evidence. The authors state that their rational was to follow the Iowa NRS "complex analysis," but they don't follow through and apply it because it was "beyond the data available for Illinois." If this practice is beyond the possibility of analysis, it should not be considered.

Constructed wetlands. The 11-20-14 NLRS marginalizes the effectiveness of constructed wetlands with the assumption that no more than 25 percent of tile-drained land could accommodate a wetland due to landscape and other limitations. This is not the case. Wherever tile drainage occurs, i.e. as long as tile lines carry water to an outlet or main, constructed wetlands can be designed to treat the gravity-fed drainage water. The same goes for the use of bioreactors to treat tile drainage (see bioreactors below). The design varies somewhat from only using edge-of–field wetlands (Kovacic et al. 2000) to using tile interception wetlands which function equally well (TNC unpublished reports) and can be constructed where needed.

Some common sense changes are needed in the requirements for wetlands establishment in Illinois and in the Midwest to make them cost effective. Wetland costs taken from Christianson et al. (2013b) assume a 3.5:1 buffer to wetland area. This means that to build a one acre wetland would require 4.5 acres of land. Current Natural Resources Conservation Service standards require more land to be taken out of production than is needed for treatment wetlands. This is an extreme requirement that is a holdover from the restoration design for natural native wetlands. Constructed tile drainage treatment wetlands are effective without the buffer area. The buffer requirement needs to be eliminated. Such a change will make the establishment of constructed treatment wetlands more feasible for our purposes and reduce the large up-front costs.

The 11-20-14 NLRS report states that Iowa constructed wetlands are typically many acres in size and are fed by drainage areas of 1,000-2,000 acres, intercepting tile mains we do not have in Illinois. This is incorrect, Illinois does have areas where large tile mains ultimately drain 1,000 to 2,000 acres. Iowa typically builds its wetlands on streams fed by large tile mains. Iowa constructed wetlands are the result of damming small streams. Kovacic et al. (2000) took a different approach in Illinois using smaller wetlands based on the following rationale:

- Less land would be required for any particular landowner;
- Tiles would be intercepted and drainage treated at its source, rather than allowing water to mix and nutrient concentration to be diluted with instream base flow. This provides water with higher concentrations of nutrients but reduces the volume that must be treated as compared to the Iowa approach;

- Engineering a smaller wetland is simpler and does not require the major "engineering approach" required when damming a stream, i.e., creating a sheet piling dam;
- This would also provide a more cost effective method for each landowner to treat the tile drainage water coming from their operation;
- While more individual wetlands must be built, they would still be less costly than the Iowa approach.

The 11-20-14 NLRS study assumes that the Illinois constructed wetland approach would be less effective than the Iowa approach. While Iowa uses a nitrate-nitrogen reduction value of 52% for wetlands with a 1% (.785%) wetland:watershed ratio, the Illinois 11-20-14 NLRS uses only a 40% reduction value for wetlands with a 5% wetland:watershed ratio. This is a lower value than shown by the Kovacic et al. (2000) 3-year study which reported a 46% nitrate-nitrogen reduction. The rationale for lowering the reduction efficiency was that "considering the increase in intense precipitation events in winter and spring, we conservatively estimated that constructed wetlands in Illinois would reduce nitrate-nitrogen loads by 40 percent." If this is the case, the 11-20-14 NLRS should also apply a lower reduction value to bioreactors which have an extremely limited treatment volume capacity. Currently this report does not apply the lower reduction value to bioreactors.

Iowa (2013) omitted a value for phosphorus reduction in their tables but noted that phosphorus reduction varied with specific conditions (Iowa NRS, 2013). The Kovacic et al. (2000) study found constructed wetland phosphorus reduction to be quite variable, and based on this information, the 11-20-14 NLRS assumed a 0% phosphorus removal capacity. However, a second constructed wetland study in the Lake Bloomington watershed reported a total phosphorus reduction of 56% (Kovacic et al., 2006).

These results were born out by Groh (2014), who conducted a follow-up study of the wetlands studied by Kovacic et al. (2000) and found their nutrient reduction effectiveness improved 20 years later. Average nitrate-nitrogen reduction of the three wetlands was 59%, while total P removal was 32%.

Based on the above information, the nitrogen and phosphorus reduction values for wetlands should be increased. In addition, to guarantee P removal capacity in wetlands, a simple approach such as an annual harvest of the wetland standing crop could provide biomass as well as reduce the potential for wetland P saturation. To be accurate, the wetland nitrate-nitrogen reduction factor should be listed as at least 46% and total phosphorus reduction should be listed as 32%, and not 0%.

Of all the practices available, wetlands have a distinct advantage – they have the ability to treat a majority of tile drainage flow, whereas bioreactors allow over-capacity flow to bypass the bioreactor and to enter streams without being treated. While wetlands may cost more up front than other treatments, they provide fail-safe sustainable systems that require very little maintenance after the initial costs, and are much less vulnerable to weather/precipitation

extremes. Over 20 years of data show that wetlands work. In addition, wetlands provide benefits that are not provided by the other nitrogen-reduction strategies including, hydrologic retention and wildlife habitat. Constructed wetlands will also be a visible sign of our progress in resolving the agricultural nutrient loading problem. Bioreactors once established will be out of sight, out of mind. Once they are initially established, given their high maintenance costs, there is less likelihood that bioreactors will be maintained over the long run.

Bioreactors have much less capacity, they have major perpetual costs, and they have not been proven. Cover crops must be paid for annually and there is no guarantee they will be established effectively. At a 4% discount rate, with a design life of 40 years, the total present values costs of wetlands, bioreactors and cover crops range from $22,030 – $110,149; $25,045 – $51,658; and $101,882 – $147,203, respectively. This means that in the long run it would be more cost effective to build wetlands (even if the land must be purchased) than to plant annual cover crops.

Bioreactors. The literature on the effectiveness of field scale bioreactors is still quite sparse. Studies report total nitrate-nitrogen reduction ranging from 10% -100% (Table 1-1 in Christianson et al., 2011; Christianson et al. 2012a). The studies are not consistent and they vary in the information reported. Nitrate-reduction if often reported only as a % concentration reduction rather than a reduction in load. Often key information needed to evaluate bioreactor effectiveness is missing - such as, tile drainage treatment area, bioreactor or wood chip volume used, retention time, timing of study (a full year or only several months, winter high tile flow or summer low tile flow), whether or not the bioreactors leaked or took in excess ground water in addition to tile drainage.

Studies also may be developed from very crude water and nutrient budgets. For instance, several studies assumed that inflow equaled outflow, that is, they would take only one flow measurement either at the inlet or the outlet of the bioreactor. The problem with this approach is that you cannot tell if the system is leaking or taking on water, and this can make quite a difference in the reduction estimate.

One example touting the promise of bioreactors in reducing nitrate-nitrogen to surface waters is the often cited study by Jaynes (2008) which reported a 55% nitrate-nitrogen removal efficiency. The accuracy of the removal estimate is not an issue - but the volume of wood chips to area being treated was equivalent to 602 m^3 of wood chips per ha treated (243 m^3 per acre treated), and there is no estimate of retention time. The proposed bioreactor in the 11-20-14 NLRS draft uses only 3 m^3 of wood chips per acre treated, far less than Jayne's study. For some reason, this information is conveniently left out of reviews.

The most credible study on field scale bioreactors (Christianson et al., 2012b) reported results from four field scale bioreactors designed to treat 20% of peak flow at a 4 hour retention time. The average nitrate-nitrogen reduction was 32%. Woli et al. (2010) reported a similar nitrate-nitrogen reduction of 33%, in an Illinois bioreactor study.

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Based on the above information, the Illinois NLRS nitrate-nitrogen removal estimate in the cost analysis is inflated and the nitrate-nitrogen reduction factor for Illinois bioreactors should be reduced from 40% to 33% or less.

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This discrepancy needs to be addressed because, first of all, a design life of 20 years is very short, especially when the 2025 goal is to reduce nitrate-nitrogen by 15%, or 1/3 of the target value. This implies that it will take 30 years to reach the goal. Therefore, the design life should be at least 30 years. Even more important, though, is that these practices will be in place in perpetuity, that is, as long as current corn and soybean agriculture is in place. Therefore, we should have some long range estimates of all the practice costs. While some look expensive up front, they may be more cost effective down the road because maintenance or annual costs are less. Wetlands are a good example.

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Conclusion

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References

Crumpton, W. G., D. A. Kovacic, D. L. Hey and J. A. Kostel. 2008. Potential of restored and constructed wetlands to reduce nutrient export from agricultural watersheds in the Corn Belt. Pages 29-42 *in* Final Report: Gulf Hypoxia and Local Water Quality Concerns Workshop. American Society of Agricultural and Biological Engineers, St. Joseph, Michigan.

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Christianson, L., R. Christianson, M. Helmers, C. Pederson, and A. Bhandari. 2013a. Modeling and calibration of drainage denitrification bioreactor design criteria. *Journal of Irrigation and* Drainage Engineering:1-30.

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David, M.B., L.E. Gentry, D.A. Kovacic, and K.M. Smith. 1997. Nitrogen balance in and export from an agricultural watershed. Journal of Environmental Quality 26:1038-1048.
Illinois. 2014, Illinois Nutrient Loss Reduction Strategy *draft*. 2014. Illinois Environmental Protection Agency. Springfield, Illinois.

Groh, A. 2014. "Nutrient removal and greenhouse gas emissions from 20 year old constructed wetlands receiving tile drainage water: a biogeochemical analysis." M.S. thesis, University of Illinois. Univ., Urbana, IL

Iowa. 2013. Iowa Nutrient Reduction Strategy. A science and technology-based framework to assess and reduce nutrients to Iowa waters and the Gulf of Mexico. Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources, and Iowa State University College of Agriculture and Life Sciences.

Iowa State University. 2013. Corn nitrogen rate calculator. Available at extension.agron.iastate.edu/soilfertility/nrate.aspx.

Jaynes D.B., Kaspar T.C., Moorman T.B., Parkin T.B. 2008. In situ bioreactors and deep drain-pipe installation to reduce nitrate losses in artificially drained fields. *J. of Envir. Qual.* **37**(2), 429-436.

Kovacic, D. A., M. B. David, L. E. Gentry, K. M. Starks, and R. A. Cooke. 2000. Effectiveness of constructed wetlands in reducing nitrogen and phosphorus export from agricultural tile drainage. Journal of Environmental Quality 29:1262-1274.

Kovacic, D.A., R.M. Twait, M.P. Wallace, and J.M. Bowling. 2006. Use of created wetlands to improve water quality in the Midwest-Lake Bloomington case study. Ecol. Eng. 28:258–270.. doi:10.1016/j.ecoleng.2006.08.002

Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. 2008. Gulf hypoxia action plan 2008 for reducing, mitigating, and controlling hypoxia in the northern Gulf of Mexico and improving water quality in the Mississippi River Basin. Washington, DC.

Osborne, L.L. and D.A. Kovacic. 1993. Riparian Vegetated Buffer Strips in Water-Quality Restoration and Stream Management," Freshwater Biology 29:243-258.

Stoner, N.K. 2011. Memorandum on working in partnership with states to address phosphorus and nitrogen pollution through use of a framework for state nutrient reductions. Available at www2.epa.gov/sites/production/files/documents/memo_nitrogen_framework.pdf.

U.S. Environmental Protection Agency. 2007. Hypoxia in the northern Gulf of Mexico: An update by the EPA Science Advisory Board. EPA-SAB-08-004. USEPA, Washington, DC.

Woli, K.P., M.B. David, R.A. Cooke, G.F. McIsaac, and C.A. Mitchell. 2010. Nitrogen balance in and export from agricultural fields associated with controlled drainage systems and denitrifying bioreactors. Ecological Engineering 36:1558-1566.

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From: David A. Kovacic

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DO NOT BEND

Daniels, Simon

NCRS
PC-843

From: Kovacic, David A <dkovacic@illinois.edu>
Sent: Friday, January 23, 2015 2:13 PM
To: Daniels, Simon
Cc: Maria Lemke; Wallace, Michael Patrick; Kovacic, David A; dpkovacic@sbcglobal.net
Subject: Review of the Illinois Nutrient Loss Reduction Strategy
Attachments: Kovacic review 1-23-15 Illinois Nutrient Loss Reduction Strategy .docx

Dear Mr. Daniels,

Attached please find my review of the 11-20-14 Illinois Nutrient Reduction Strategy: Draft for public review.

Best regards,

David A. Kovacic, Ph.D.

REVIEW of the ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY: draft for public comment – David A. Kovacic 1/23/2015

The Illinois Nutrient Loss Reduction Strategy is an important first step in achieving the goals set forth by U.S. EPA 2008 Gulf Hypoxia Action Plan to reduce point and non-point sources inputs of nitrogen and phosphorus to the Mississippi River. The strategies used must be reliable and cost effective not just initially, but over the long term. Those strategies set into place to mitigate water quality problems will be required in perpetuity. Of course, as a living document, plans can incorporate advances in technology which provide better strategies in the future. However, it is critical that initial strategies are correct so that the benefits reflect the costs and Illinois does not follow a trajectory of failure from which the state cannot recover.

It is with these concerns that I have reviewed the current NLRS draft of November 20, 2014. I focus on strategies that reduce agricultural nitrogen loading to surface waters. Agricultural nitrogen loading accounts for 82% of all nitrogen entering the Mississippi River. This review considers the strengths and weaknesses in the report's strategies to reduce agricultural nonpoint source loading.

Strengths of the 11-20-14 NLRS draft

N and P loading. The plan provides reliable statewide estimates of N and P loading and sources which are a critical part of the nutrient reduction strategy.

Maximum return to nitrogen. The plan calls for an across-the-board change in fertilizer management using Maximum Return to Nitrogen (MRTN) calculator (Iowa State University, 2013), to optimize farm profits while reducing N application. This is a good, common sense approach which increases income by reducing work and fertilizer costs.

Spring fertilizer application. The plan calls for an across the board change in application timing with all fertilizer applied in the spring or during the growing season. This will reduce nitrate losses following nitrification of fall applied anhydrous ammonia, it will also reduce fertilizer requirements because runoff losses will be less. It may, however, increase costs of equipment and time requirements, but overall, as with MRTN, it is a relatively "easy fix."

Water table management. Water table management (WTM) is rejected as a nutrient management strategy because results are questionable. There is reason to believe that nutrient laden subsurface water will bypass the WTM structures rendering the approach ineffective.

Weaknesses of the 11-20-14 NLRS draft

Cover crops. After MRTN and spring fertilizer application, cover crops are the third major across-the-board in-field management change suggested. Optimum establishment of cover crops can work well to reduce N losses by retaining excess end of season available soil N. However, with cover crops the farmer is relying on optimum cover crop growth under non-ideal conditions (Christianson et al. 2013b). In addition, herbicides are often required to kill cover crops before planting and a corn yield reduction of up to 6% can occur. Added to this is the annual cost of planting and spraying which ranges from $59 - $115 per ha ($ 24 - $47 per acre) (Christianson et al. 2013b). Overall there is considerable annual investment required in the use of cover crops with a low chance that the approach will be successful.

The NLRS reports the costs of cover crops to be $3.21 per lb of nitrogen (N) removed, with an EAC of $29 per acre. This is an extremely low estimate when compared to the Christianson et al. (2013b) cover crop EAC estimates which ranged from $164 - $221 per ha per year ($66 - $89 per acre per year). It is also an extremely low estimate when compared to the Iowa Nutrient Reduction Strategy (NRS) (2013) EAC for cover crops which ranged from $40.5 to $80.5 per acre. Christianson et al. (2013b) found this to be the most expensive approach at an N removal cost of $55 per kg of N ($25 per lb of N). This was also one of the most expensive removal costs reported by the Iowa NRS ($5.96 per lb of N).

I question how there can be such disparity in the 11-20-14 NLRS versus the Christianson and Iowa NRS cover crop cost estimates. Because of large cost uncertainty and yield impact variability, the practice of utilizing cover crops is primarily implemented for reasons other than N reduction (Christianson et al. 2013b). As a result, the costs of using cover crops for nitrogen management may far outweigh the benefits.

Buffer strips. Buffer strips have been shown to be highly effective in reducing subsurface N loading and surface P runoff to streams (Osborne and Kovacic, 1993). However, in tile-drained areas, these have been shown to be ineffective because buffer strip N removal is short-circuited by the tile drains which deliver a majority of the subsurface drainage water and nearly all the nitrate-nitrogen to surface waters. Illinois agriculture contributes 80% of the state's annual nitrate load to the Mississippi River as nonpoint source nitrogen, most of which enters surface waters through tile drainage (David et al., 1997). An estimated 48% of total P results from nonpoint source agricultural P and another 48% results from municipal point source P. While riparian buffer strips may be effective in reducing P in surface runoff, the U.S. EPA has recognized nitrate-nitrogen as the primary nutrient leading to formation of the Gulf hypoxic zone (U.S.EPA, 2007).

As far as N removal, it would make sense for the 11-20-14 NLRS to focus on the major source of nitrate loading to streams (tile drainage). Placing buffers on all agricultural streams in the state would seem to divert the focus from nitrate removal. Because buffers in tile drained areas are not effective in removing nitrate-nitrogen, a much better strategy would be to focus limited resources on strategies that are effective (wetlands and bioreactors).

Point source pollution is more readily dealt with since it is leaving a confined source. Therefore the reduction of P loading should focus mainly on point sources with non-point source P reduction being secondary.

The rationale for the use of buffer strips in tile-drained regions is poorly supported with research evidence. The authors state that their rational was to follow the Iowa NRS "complex analysis," but they don't follow through and apply it because it was "beyond the data available for Illinois." If this practice is beyond the possibility of analysis, it should not be considered.

Constructed wetlands. The 11-20-14 NLRS marginalizes the effectiveness of constructed wetlands with the assumption that no more than 25 percent of tile-drained land could accommodate a wetland due to landscape and other limitations. This is not the case. Wherever tile drainage occurs, i.e. as long as tile lines carry water to an outlet or main, constructed wetlands can be designed to treat the gravity-fed drainage water. The same goes for the use of bioreactors to treat tile drainage (see bioreactors below). The design varies somewhat from only using edge-of–field wetlands (Kovacic et al. 2000) to using tile interception wetlands which function equally well (TNC unpublished reports) and can be constructed where needed.

Some common sense changes are needed in the requirements for wetlands establishment in Illinois and in the Midwest to make them cost effective. Wetland costs taken from Christianson et al. (2013b) assume a 3.5:1 buffer to wetland area. This means that to build a one acre wetland would require 4.5 acres of land. Current Natural Resources Conservation Service standards require more land to be taken out of production than is needed for treatment wetlands. This is an extreme requirement that is a holdover from the restoration design for natural native wetlands. Constructed tile drainage treatment wetlands are effective without the buffer area.
The buffer requirement needs to be eliminated. Such a change will make the establishment of constructed treatment wetlands more feasible for our purposes and reduce the large up-front costs.

The 11-20-14 NLRS report states that Iowa constructed wetlands are typically many acres in size and are fed by drainage areas of 1,000-2,000 acres, intercepting tile mains we do not have in Illinois. This is incorrect, Illinois does have areas where large tile mains ultimately drain 1,000 to 2,000 acres. Iowa typically builds its wetlands on streams fed by large tile mains. Iowa constructed wetlands are the result of damming small streams. Kovacic et al. (2000) took a different approach in Illinois using smaller wetlands based on the following rationale:

- Less land would be required for any particular landowner;
- Tiles would be intercepted and drainage treated at its source, rather than allowing water to mix and nutrient concentration to be diluted with instream base flow. This provides water with higher concentrations of

nutrients but reduces the volume that must be treated as compared to the Iowa approach;

- Engineering a smaller wetland is simpler and does not require the major "engineering approach" required when damming a stream, i.e., creating a sheet piling dam;
- This would also provide a more cost effective method for each landowner to treat the tile drainage water coming from their operation;
- While more individual wetlands must be built, they would still be less costly than the Iowa approach.

The 11-20-14 NLRS study assumes that the Illinois constructed wetland approach would be less effective than the Iowa approach. While Iowa uses a nitrate-nitrogen reduction value of 52% for wetlands with a 1% (.785%) wetland:watershed ratio, the Illinois 11-20-14 NLRS uses only a 40% reduction value for wetlands with a 5% wetland:watershed ratio. This is a lower value than shown by the Kovacic et al. (2000) 3-year study which reported a 46% nitrate-nitrogen reduction. The rationale for lowering the reduction efficiency was that "considering the increase in intense precipitation events in winter and spring, we conservatively estimated that constructed wetlands in Illinois would reduce nitrate-nitrogen loads by 40 percent." If this is the case, the 11-20-14 NLRS should also apply a lower reduction value to bioreactors which have an extremely limited treatment volume capacity. Currently this report does not apply the lower reduction value to bioreactors.

Iowa (2013) omitted a value for phosphorus reduction in their tables but noted that phosphorus reduction varied with specific conditions (Iowa NRS, 2013). The Kovacic et al. (2000) study found constructed wetland phosphorus reduction to be quite variable, and based on this information, the 11-20-14 NLRS assumed a 0% phosphorus removal capacity. However, a second constructed wetland study in the Lake Bloomington watershed reported a total phosphorus reduction of 56% (Kovacic et al., 2006).

These results were born out by Groh (2014), who conducted a follow-up study of the wetlands studied by Kovacic et al. (2000) and found their nutrient reduction effectiveness improved 20 years later. Average nitrate-nitrogen reduction of the three wetlands was 59%, while total P removal was 32%.

Based on the above information, the nitrogen and phosphorus reduction values for wetlands should be increased. In addition, to guarantee P removal capacity in wetlands, a simple approach such as an annual harvest of the wetland standing crop could provide biomass as well as reduce the potential for wetland P saturation. To be accurate, the wetland nitrate-nitrogen reduction factor should be listed as at least 46% and total phosphorus reduction should be listed as 32%, and not 0%.

Of all the practices available, wetlands have a distinct advantage – they have the ability to treat a majority of tile drainage flow, whereas bioreactors allow over-capacity flow to bypass the bioreactor and to enter streams without being treated. While wetlands may cost more up front

than other treatments, they provide fail-safe sustainable systems that require very little maintenance after the initial costs, and are much less vulnerable to weather/precipitation extremes. Over 20 years of data show that wetlands work. In addition, wetlands provide benefits that are not provided by the other nitrogen-reduction strategies including, hydrologic retention and wildlife habitat. Constructed wetlands will also be a visible sign of our progress in resolving the agricultural nutrient loading problem. Bioreactors once established will be out of sight, out of mind. Once they are initially established, given their high maintenance costs, there is less likelihood that bioreactors will be maintained over the long run.

Bioreactors have much less capacity, they have major perpetual costs, and they have not been proven. Cover crops must be paid for annually and there is no guarantee they will be established effectively. At a 4% discount rate, with a design life of 40 years, the total present values costs of wetlands, bioreactors and cover crops range from $22,030 – $110,149; $25,045 – $51,658; and $101,882 – $147,203, respectively. This means that in the long run it would be more cost effective to build wetlands (even if the land must be purchase) than to plant annual cover crops.

Bioreactors. The literature on the effectiveness of field scale bioreactors is still quite sparse. Studies report total nitrate-nitrogen reduction ranging from 10% -100% (Table 1-1 in Christianson et al., 2011; Christianson et al. 2012a). The studies are not consistent and they vary in the information reported. Nitrate-reduction if often reported only as a % concentration reduction rather than a reduction in load. Often key information needed to evaluate bioreactor effectiveness is missing - such as, tile drainage treatment area, bioreactor or wood chip volume used, retention time, timing of study (a full year or only several months, winter high tile flow or summer low tile flow), whether or not the bioreactors leaked or took in excess ground water in addition to tile drainage.

Studies also may be developed from very crude water and nutrient budgets. For instance, several studies assumed that inflow equaled outflow, that is, they would take only one flow measurement either at the inlet or the outlet of the bioreactor. The problem with this approach is that you cannot tell if the system is leaking or taking on water, and this can make quite a difference in the reduction estimate.

One example touting the promise of bioreactors in reducing nitrate-nitrogen to surface waters is the often cited study by Jaynes (2008) which reported a 55% nitrate-nitrogen removal efficiency. The accuracy of the removal estimate is not an issue - but the volume of wood chips to area being treated was equivalent to 602 m^3 of wood chips per ha treated (243 m^3 per acre treated), and there is no estimate of retention time. The proposed bioreactor in the 11-20-14 NLRS draft uses only 3 m^3 of wood chips per acre treated, far less than Jayne's study. For some reason, this information is conveniently left out of reviews.

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Iowa State University. 2013. Corn nitrogen rate calculator. Available at extension.agron.iastate.edu/soilfertility/nrate.aspx.

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Kovacic, D.A., R.M. Twait, M.P. Wallace, and J.M. Bowling. 2006. Use of created wetlands to improve water quality in the Midwest-Lake Bloomington case study. Ecol. Eng. 28:258–270.. doi:10.1016/j.ecoleng.2006.08.002

Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. 2008. Gulf hypoxia action plan 2008 for reducing, mitigating, and controlling hypoxia in the northern Gulf of Mexico and improving water quality in the Mississippi River Basin. Washington, DC.

Osborne, L.L. and D.A. Kovacic. 1993. Riparian Vegetated Buffer Strips in Water-Quality Restoration and Stream Management," Freshwater Biology 29:243-258.

Stoner, N.K. 2011. Memorandum on working in partnership with states to address phosphorus and nitrogen pollution through use of a framework for state nutrient reductions. Available at www2.epa.gov/sites/production/files/documents/memo_nitrogen_framework.pdf.

U.S. Environmental Protection Agency. 2007. Hypoxia in the northern Gulf of Mexico: An update by the EPA Science Advisory Board. EPA-SAB-08-004. USEPA, Washington, DC.

Woli, K.P., M.B. David, R.A. Cooke, G.F. McIsaac, and C.A. Mitchell. 2010. Nitrogen balance in and export from agricultural fields associated with controlled drainage systems and denitrifying bioreactors. Ecological Engineering 36:1558-1566.

Daniels, Simon

NLRS
PC-844

From: Lurkins, Lauren <LLurkins@ilfb.org>
Sent: Friday, January 23, 2015 2:25 PM
To: Daniels, Simon
Cc: Weinzierl, Rodney; Caroline Wade (cwade@ilcorn.org); Hobart, Liz (LHobart@growmark.com); tim@ilpork.com; Amy Roady (roadya@ilsoy.org); levinm@ilsoy.org
Subject: Illinois Farm Bureau, Illinois Corn Growers Association, Illinois Pork Producers Association, Illinois Soybean Growers and GROWMARK, Inc. Comments on Draft NLRS
Attachments: NLRS Comment (IFB ICGA IPPA ISG GROWMARK)(Final 1.23.15).pdf; NLRS Comments Attachment 1 (Final)(1.23.15).docx

Simon,
On behalf of Illinois Farm Bureau, Illinois Corn Growers Association, Illinois Pork Producers Association, Illinois Soybean Growers and GROWMARK, Inc., please accept the attached comments on the draft NLRS. In addition to the comment letter, we have also attached our recommended changes to the agricultural part of the NLRS to reflect the evolution of Council on Best Management Practices projects to reflect the implements of the strategy.

In addition to the attached comments, we have received several notes from individual farmers within our memberships for access to the research documents upon which the NLRS is based. Could you please provide that information on a website accessible to the public, or if that already exists, provide the stakeholder group (or public) with the universe of material?

Finally, will Illinois EPA be providing the public a docket of the public comments received, or providing a responsiveness summary as to the same?

Thank you,

Lauren C. Lurkins
Director of Natural and Environmental Resources
Governmental Affairs and Commodities Division
Illinois Farm Bureau
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January 23, 2015

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
Simon.Daniels@illinois.gov

RE: IFB, ICGA, IPPA, ISG AND GROWMARK, Inc.
Comments on Draft Illinois Nutrient Loss Reduction Strategy

To Whom It May Concern:

Illinois Farm Bureau® (IFB), Illinois Corn Growers Association (ICGA), Illinois Pork Producers Association (IPPA), Illinois Soybean Growers (ISG) and GROWMARK, Inc. (GROWMARK) appreciate the opportunity to file this joint comment regarding the draft Illinois Nutrient Loss Reduction Strategy (Strategy).

First, we appreciate the Illinois Environmental Protection Agency (Illinois EPA) and Illinois Department of Agriculture's (IDOA) lead – and all of the stakeholders' involvement – in developing the Strategy. We are further committed, as individual organizations and businesses, to participating in future discussions regarding the Strategy and in leading the implementation of the agricultural aspects of the Strategy. Specifically, we look forward to continuing our work with Illinois EPA, IDOA and other stakeholders in future committees and forums set up to implement the Strategy. We will remain accountable to the public to show progress in meeting the stated targets of the Strategy.

We also appreciate that education, outreach and voluntary incentive-based practices will continue to be the primary tools for addressing the agricultural components of the Strategy and achieving long term goals. Compared to a regulatory or litigation-driven approach, this voluntary approach will allow the strategy to be dynamic with innovation and new research. It will lend itself to more widespread adoption of necessary best management practices (BMPs) to address this complicated issue. Illinois farmers are committed to continued use of BMPs, as they care deeply about the quality of the water in our state and that which makes its way to the Gulf of Mexico.

Farmers make decisions for their operations based on solid science and economics. When armed with the necessary information, they will make good decisions that benefit, not only their businesses, but also the environment. No Illinois farm is the same. Farms can consist of row crops, livestock or a combination of both. Farms can consist of different crop rotations, tillage

practices, nutrient sources, nutrient management practices, and the presence or absence of tile drainage. In addition, each of those operational or business differences are further complicated by many other factors, including weather, soil type, proximity to surface waters, and topography. We say this all the time, but it is especially true in the context of nutrient management: there is no one-size-fits-all-approach.

We believe that education, both to row crop and livestock farmers, should remain the focus of the Strategy in these early stages. Just as with anything, in order for someone to address an issue, it is critical that they first have an awareness of what the issue is, why it exists, and what part they play in both the issue and the solution.

Even as the Strategy has been developing, we have been working hard on implementing key elements that are included in it. There currently exists a great amount of momentum and collaboration within the agricultural community in Illinois that will lead to positive results in the future. Specifically, we have been working together to educate the farmer members we represent, our farmer leaders and our farmer customers on the Strategy itself, why it exists and what it means. Such work has been done thus far through in-person presentations, radio interviews and advertisements, publication and newsletter articles, and website and online information. In addition, although not directly mentioned in the draft Strategy, IFB and IPPA have been working together, with the guidance of Illinois EPA, to educate livestock producers throughout our state on the new Illinois environmental rules for livestock farms and when they are required to obtain NPDES permits.

On a voluntary basis, and without the need for regulation, our organizations and businesses have been providing, and will continue to provide, credible, science-based education, outreach and demonstration to our farmer members. We are committed to providing such information individually, as well as in combination with each other and other groups, as part of the Illinois Council on Best Management Practices (CBMP). CBMP's work for 2015 will focus on the Keep it for the Crop (KIC) Education and Outreach Program, which is a comprehensive, collaborative program for science-based outreach and education designed to promote enhanced nutrient stewardship and implementation of voluntary agricultural BMPs to reduce nutrient losses and improve water quality. Once the Strategy is final, a significant portion of CBMP's KIC Education and Outreach Program will focus on an education program geared at farmers to explain the Strategy in a way that is focused on the science for their particular region of the state. Please see Attachment 1 hereto for recommended language changes to update the draft Strategy in order to reflect CBMP's work plan for 2015.

With regard to research of nutrient issues, we believe that it is critical that such research, both in the private and public realms, continue to be a priority for our state. Specifically, research should continue to refine the BMP tables included in the draft Strategy for agriculture as we better understand the resulting nutrient reductions from the listed practices and the cost per pound of nutrient removed. It is important to note that countless farmers across our state currently engage in on-farm research in the private domain. Such research is not captured in the public realm, but, nonetheless, produces results other farmers in the state rely on heavily. Such creativity and innovation would come to a halt with the creation of a one-size-fits-all standard of activity.

With regard to numeric nutrient criteria, we have serious concerns regarding the development of additional regulatory requirements in the form of numeric nutrient criteria in Illinois. Instead of focusing on establishing numeric nutrient criteria, it is possible to achieve reasonable results through implementation strategies that are appropriate regardless of whether narrative or numeric criteria are used. A great amount of progress will be made in achieving reductions in nutrient losses through the implementation of the Strategy, as discussed above.

The existence of numeric nutrient criteria and obligations to comply with them could reduce point source and non-point source dischargers' incentives to expend resources on voluntary measures contemplated in the Strategy. For example, if there is a regulatory or permit requirement effective on a date certain, a discharger is not likely going to go beyond those requirements before that time. In addition, in the case of a TMDL, if the load allocations are going to require dischargers to reduce loading by a certain percentage, it is not likely that they would voluntarily reduce loading before that time for fear that they would not get the credit for that reduction.

If Illinois EPA insists on moving forward with the development of numeric nutrient criteria in Illinois, it is important that whatever such criteria are developed are achievable by both point and non-point sources. It is a large financial investment to implement efforts to remove nutrients from point source discharges and to install and maintain measures, practices and infrastructure on agricultural lands. Further, if the numeric nutrient criteria are set too low, it will be difficult for state government to determine spending priorities because essentially all streams in the state will be deemed impaired.

Establishing one number for each type of water (lakes, reservoirs, rivers/streams) has been shown to result in numbers which are not statistically significant for any specific water. Moreover, the methodology which exists to gather information for setting the numbers is not scientifically sound. Data showing the relationship is limited and models are often used to set the levels. The models are often inaccurate and assumptions are made which have no basis in fact. There is a lack of cause-effect connection between the nutrient level in the water and the impairments of the waterbody. Other factors, such as geography, stream flow, precipitation, temperature and sunlight all play large roles in whether an undesirable condition is present in the waterbody. It is, therefore, critical that individual watersheds be analyzed and studied in detail to attempt to identify such a cause-effect connection between the nutrient level in the water and the impairments of the waterbody. Such investigation should be done by a qualified scientific advisory committee, on which agriculture is adequately represented. We look forward to participating in that process moving forward.

Thank you for the opportunity to comment and for the collaboration and leadership of both Illinois EPA and IDOA. We look forward to partnering and engaging with various stakeholders on efforts to reduce the impacts of nutrient loss on the environment and industry.

Respectfully,

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ATTACHMENT 1

Nutrient Loss Reduction Strategies for Agricultural Non-Point Sources

Agricultural Contributions

Agricultural runoff is a significant source of total phosphorus and nitrate-nitrogen loading into Illinois waterbodies. Total phosphorus losses are typically due to soil erosion into surface waters, while nitrate-nitrogen losses commonly occur when nutrients are carried in water via tile drainage. However, both nutrients can be lost by either route, and both routes affect surface and ground water quality.

According to the Illinois science assessment (chapter 3), agricultural runoff contributes 80 percent of the nitrate-nitrogen and 48 percent of the total phosphorus losses exported from the state. The non-point source nitrate-nitrogen yield average was estimated at 10 lb/acre/yr, with 27 eight-digit Hydrologic Unit Code (HUC) watersheds showing greater losses. The greatest nitrate-nitrogen losses were found in the tile-drained northern two-thirds of the state, where artificial drainage is common and the land use is dominated by row crop agriculture. Total phosphorus non-point source losses were estimated at an average yield of 1.4 lb/acre/yr and were typically greater in southern Illinois and lower in the northernmost parts of the state.

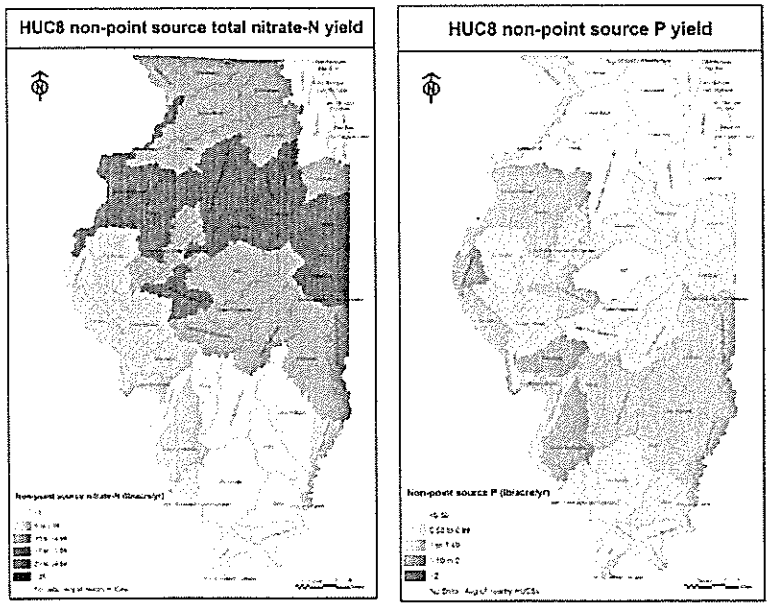

Figure 6.1. Non-point source nitrate-nitrogen and total phosphorus yields by HUC8.

Current Programs and Projects Supporting Nutrient Reduction Goals

State Programs and Projects

Section 319

Section 319 is a grant program under the Clean Water Act (33 U.S.C. 1329) that disburses funds to states with approved non-point source management plans. States in turn can competitively award grants to qualified applicants to support non-point source pollution control.

Through technical and financial assistance, and to facilitate the planning process, the Illinois Environmental Protection Agency (Illinois EPA) encourages the development of watershed-based plans consistent with current watershed planning principles. Plan development and monitoring is tracked through the Research Management Mapping Service. Visit www.rmms.illinois.edu for more information.

By implementing agricultural best management practices (BMPs), the Section 319 program alone has reduced annual loads of nitrate-nitrogen by 805,000 lbs/yr, total phosphorus loads by 381,000 lbs/yr, and sediment loads by 531,000 tons/yr. Examples of agricultural BMPs completed through Section 319 funding include 147,000 acres of nutrient management, which is estimated to have reduced nitrate-nitrogen loads by 110,000 lbs/yr, total phosphorus by 54,000 lbs/yr, and sediment by 37,000 tons/yr. Filter strip BMPs on 14,000 acres also account for annual reductions of 330,000 lbs of nitrate-nitrogen, 167,000 lbs of total phosphorus, and 107,000 tons of of sediment.

Clean Water Initiative and State Revolving Fund

Funding for non-point source pollution control projects, including agricultural sources, is available through the State Revolving Fund loan program as a result of recent eligibility expansions under the Clean Water Initiative (Public Act 98-0782) designed to address stormwater runoff, which can contribute nutrient loading Illinois waters.

Conservation Reserve Enhancement Program

The Illinois Conservation Reserve Enhancement Program (CREP) is a state incentive program tied to the U.S. Department of Agriculture (USDA) Federal Conservation Reserve Program (CRP). CREP achieves long-term environmental benefits by allowing 232,000 acres of eligible environmentally-sensitive land within the Illinois and Kaskaskia River watersheds to be restored, enhanced, and protected over periods ranging from 15 years to perpetuity. CREP is driven by locally-led conservation efforts, as evidenced by increased landowner support, and employs a variety of BMPs to protect and restore riparian corridors. This program is a prime example of how partnerships between landowners, governmental entities, and non-governmental organizations can work to address watershed quality concerns.

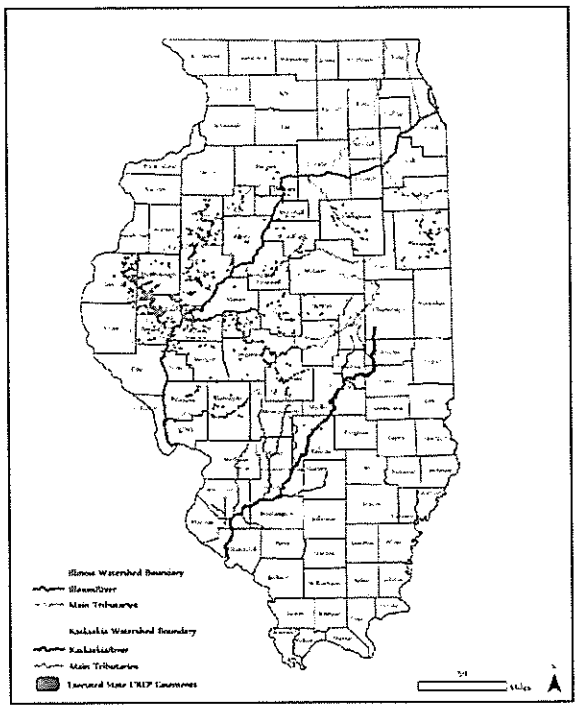

Figure 6.2. Conservation Reserve Enhancement Program easements.

CREP is one of many tools used by the Illinois Department of Natural Resources (INDR) and its conservation partners to implement the Illinois Comprehensive Wildlife Action Plan, which provides a framework for restoring critical habitats, increasing plant diversity, and expanding habitats for species in greatest need of conservation in a predominately agricultural landscape.

Since CREP's inception in 1998, 135,517 acres have been enrolled in federal CREP contracts at an average rental rate of $188.6/acre. The state has also successfully executed 1,316 CREP easements, protecting 83,273 acres. These easements have prevented approximately 150,000 lbs of nitrate-nitrogen at an average of 3.15 lbs/acre, 42,263 lbs of total phosphorus at an average of 0.87 lbs/acre, and 34,084 tons of sediment at an average of 0.7 tons/acre from entering the Illinois and Kaskaskia rivers each year.

Partners for Conservation Cost-Share Program

The Illinois Department of Agriculture (IDOA) administers several initiatives promoting advanced nutrient management, conservation tillage, and the use of cover crops. These programs reduce soil erosion, sedimentation, and nutrient runoff, leading to improved water quality. IDOA's Partners for Conservation (PFC) cost-share program provides funding for the implementation of cultural (e.g., no-till and cover crops) and structural (e.g., grassed waterways and terraces) conservation practices. PFC funds are allocated annually to local soil and water conservation districts (SWCDs) for distribution to eligible landowners for carrying out BMPs that will benefit the environment.

The 97 local SWCDs throughout Illinois play a key role in fostering locally-led conservation work in rural and urban areas. They conduct outreach to increase public awareness of the importance of natural resource conservation. In addition, they hold landowner signups to build conservation projects and prioritize project proposals for funding based on the environmental benefits. Their technical staff provides landowners conservation practice design and

construction oversight. The SWCDs are a very important asset in the delivery of IDOA's soil and water conservation programs to rural and urban customers. They also assist the USDA Natural Resources Conservation Service (NRCS) in the construction of conservation projects through various programs authorized by the U.S. Farm Bill.

Conservation practices eligible for cost-share assistance through PFC include terraces, grassed waterways, water and sediment control basins, grade stabilization structures, crop residue management, cover crops, and nutrient management plans. A total of 6,733 PFC projects were completed by landowners in 2006-2012. Although the state's portion of the cost of these projects totaled almost $17 million, this amounts to approximately 50 percent of the cost of construction, with a little less than half of the cost contributed by landowners.

These projects reduced soil erosion on 68,088 acres of cropland. The installed practices also reduced nutrient loading to streams throughout the state by an estimated 403,089 lb of nitrate-nitrogen and 200,686 lb of total phosphorus. Sediment delivery was reduced by 170,587 tons, which translates to an estimated 8,529 semi-trailer loads of sediment kept out of Illinois waterways.

Streambank Stabilization and Restoration Program

In an effort to stabilize and restore severely eroding stream banks that would otherwise contribute sediment to the state's rivers and tributaries, IDOA with, assistance from SWCDs, administers the Streambank Stabilization and Restoration Program (SSRP). Severely eroding stream banks can contribute as much as 30-50 percent of the sediment entering waterways from all sources. The SSRP, funded under PFC, provides funds to construct low-cost techniques to stabilize eroding stream banks. Examples of these practices include rock riffles, stone toe protection, and bendway weirs. In 2004-2012, 58 miles of eroding stream banks were stabilized, resulting in a 61,389 ton reduction in sediment delivery. Loading of nitrate-nitrogen was also reduced by 107,214 lb and total phosphorus by 57,308 lb.

Federal Programs and Projects

Environmental Quality Incentives Program

The Environmental Quality Incentives Program (EQIP) is a voluntary program originally authorized under the 1996 Farm Bill (Pub. L. 104-127) and re-authorized in the 2014 Farm Bill (Pub. L. 113-79). Eligible program participants receive financial and technical assistance to implement conservation practices or activities such as conservation planning that address natural resource concerns on their land. NRCS staff works with applicants to develop an EQIP plan of operations that identifies the appropriate conservation practices needed to address identified natural resource concerns. Natural resource concerns include improvement of soil, water, plant, animal, air, and related resources on agricultural land and non-industrial private forestland.

Applications for EQIP are accepted on a continuous basis, and NRCS establishes submission deadlines for evaluation and ranking of eligible applications. Applications are ranked based on a number of factors, including the environmental benefits and cost effectiveness of the proposal. Payments are made to participants after the conservation practices and activities identified in the plan are implemented. Contracts can last up to 10 years. Information on practices available for funding in Illinois can be found at www.nrcs.usda.gov/wps/portal/nrcs/main/il/programs/financial/. NRCS conservation practices for Illinois can be found in section IV of the Field Office Technical Guide at efotg.sc.egov.usda.gov/efotg_locator.aspx?map.

The USDA NRCS provides technical and financial assistance to agricultural producers and landowners. NRCS works in close partnership with farmers and ranchers, local and state governments, federal agencies, and non-governmental organizations to maintain healthy and productive working landscapes. There are 94 NRCS field offices in Illinois in addition to the state office in Champaign, which administers federal conservation programs. These programs provide financial assistance for the implementation of conservation practices that can help reduce the loading of nitrate-nitrogen and total phosphorus to improve water quality in Illinois and address the Gulf of Mexico hypoxia. While these federal programs address resource concerns besides water quality, such as air, wildlife, and energy, there are often additional water quality benefits that can be gained.

Conservation Stewardship Program

The Conservation Stewardship Program (CSP) helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.

Through CSP, participants can take additional steps to improve soil health, air and habitat quality, water quality and quantity, and energy conservation on their land. CSP provides two types of payments through five-year contracts: annual payments for installing new conservation activities and maintaining existing practices and supplemental payments for adopting a resource-conserving crop rotation. Producers may be able to renew a contract if they have successfully fulfilled the initial contract and agree to achieve additional conservation objectives.

Easement Programs

NRCS offers voluntary easement programs to landowners who want to maintain or enhance their land in ways that are beneficial to the environment. The 2014 Farm Bill authorized the Agricultural Conservation Easement Program (ACEP) and the Healthy Forests Reserve Program (HFRP). ACEP provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. ACEP consolidates programs authorized by previous Farm Bills, including the Wetlands Reserve Program (WRP), Grassland Reserve Program, and Farm and Ranch Lands Protection Program. Under ACEP, NRCS helps Indian tribes, state and local governments, and non-governmental organizations protect working agricultural lands and limit

non-agricultural uses of the land. Under the easement component of WRP, NRCS helps restore, protect, and enhance enrolled wetlands. HFRP helps landowners restore, enhance, and protect forestland resources on private lands through easements and financial assistance. Through HRFP, landowners can promote the recovery of endangered or threatened species, improve plant and animal biodiversity, and enhance carbon sequestration.

Regional Conservation Partnership Program

This program, which competitively award funds to conservation projects designed by local partners specifically for their region, was authorized in the 2014 Farm Bill. The Regional Conservation Partnership Program (RCPP) provides assistance to producers through partnership agreements and program contracts or easements. RCPP encourages partners to join in conservation efforts by leveraging RCPP funding for conservation activities in select project areas. Illinois has set priorities for water quality, soil health, and soil erosion for funding proposals. Additional RCPP information is available at www.nrcs.usda.gov/wps/portal/nrcs/main/il/programs/farmbill/rcpp/.

IDOA is a primary partner in three project applications currently under review. The applications focus on greatly expanding current statewide conservation cropping programs to improve soil health throughout the state, establishing extensive, targeted suites of BMPs in priority watersheds to improve water quality in these key areas, and reducing soil erosion and runoff in counties adjacent to the Mississippi River. Illinois EPA and several non-profit organizations are partners on the first two applications. IDOA partnered with Iowa, Minnesota, Missouri, Wisconsin, and the Upper Mississippi River Basin Association on the third.

Cost-Share and Technical Assistance Funding

The Illinois office of NRCS receives fiscal year allocations from USDA for the programs and initiatives they are authorized to administer. For program funding information for fiscal years 2005-2012, visit www.nrcs.usda.gov/Internet/NRCS_RCA/reports/cp_il.html#ncpd.

Mississippi River Basin Initiative

The Mississippi River Basin Initiative (MRBI) was developed to improve the health of the Mississippi River Basin, including water quality and wildlife habitat. Through this initiative, NRCS and its partners help producers in select watersheds voluntarily implement conservation practices that avoid, control, and trap nutrient runoff, improve wildlife habitat, and maintain agricultural productivity. These improvements are accomplished through a conservation systems approach to manage and optimize nitrate-nitrogen and total phosphorous within fields to minimize runoff and reduce downstream nutrient loading. NRCS will provide producers assistance with a system of practices that control soil erosion, improve soil quality, and provide wildlife habitat while managing runoff and drainage water for improved water quality.

Watersheds in Illinois eligible for MRBI funding in fiscal year 2014 include Big Bureau Creek, Senachwine Creek, and Indian Creek. The Salt Fork Vermilion River Watershed was previously eligible.

Driftless Area Landscape Conservation Initiative

Funded through EQIP, the Driftless Area Landscape Conservation Initiative offers financial assistance to agricultural producers for implementing practices that reduce erosion and sediment delivery to surface water and improve fish and wildlife habitats in the Illinois Driftless Area. This area encompasses a portion of northwestern Illinois that includes the Rock River Watershed and areas that drain directly into the Mississippi River.

> Authorized in the 2008 Farm Bill, these federal initiatives target specific watersheds in Illinois to offer additional financial assistance through EQIP, CSP, and other NRCS programs to address specific resource concerns related to water quality. More information available at www.nrcs.usda.gov/wps/portal/nrcs/main/il/programs/.

National Water Quality Initiative

The National Water Quality Initiative provides financial assistance to help farmers and ranchers implement conservation systems to reduce nitrate-nitrogen, total phosphorous, sediment, and pathogen contributions from agricultural land. Eligible producers receive assistance under EQIP for installing conservation systems that may include practices such as nutrient management, cover crops, conservation cropping systems, filter strips, terraces, and, in some cases, edge-of-field water quality monitoring. Eligible watersheds in Illinois include Douglas Creek, Bonpas Creek, and Lake Vermilion. Illinois EPA has committed to long-term monitoring of Lake Debrey in the Lake Vermillion Watershed.

Industry Related Programs and Projects

The Nutrient Research & Education Council

> Given increased concern over nutrient losses attributed to agriculture and budget cuts to both federal and state water quality research and outreach programs, Illinois agricultural organizations came together in 2010 to design and enact a new structure to define, implement, and sustain an overall strategy to minimize environmental impact, optimize harvest yield, and maximize nutrient utilization (a.k.a., MOM).

In 2012, a group of agricultural organizations, state agencies, and environmental groups, successfully worked with the Illinois General Assembly to enact changes to the Illinois Fertilizer Act (505 ILCS 80) to create the Nutrient Research & Education Council (NREC). NREC is a public-private partnership that assures a sustainable source of funding for nutrient research and education programs. NREC is made up of nine voting members from agricultural sector and four non-voting members, including representatives from environmental groups, Illinois EPA, and academia. The partnership between NREC and IDOA ensures that a $.75/ton assessment on all bulk fertilizer sold in Illinois is allocated to research and educational programs focused on nutrient use and water quality.

NREC funded two water quality research projects in 2013, including An Agronomic & Environmental Assessment of Cover Crops and Phosphorus Runoff Potential in Fields with Minimal Slope. These on-going projects totaled $320,048.

In 2014, NREC provided over $2.55 million to 14 projects, including educational and outreach programs as well as several research projects addressing the need to reduce nutrient losses from agricultural sources and evaluating the effectiveness of various nutrient management practices in improving water quality. These projects include:

- Nitrogen Management Over Tile Drained Fields to Optimize Yields & Minimize Loss, University of Illinois
- A Field Scale Comparison of Nitrogen Efficiency Practices to Reduce Losses, Illinois State University
- Late Nitrogen Application in Southern Illinois to Minimize Losses, Southern Illinois University Carbondale
- An Agronomic & Environmental Assessment of Cover Crops, University of Illinois and Southern Illinois University Carbondale
- An Analysis of Farmer's Nitrogen Management Practices, Illinois State University
- A Paired Cover Crop Study to Determine Impact of Cover Crops on Water Quality, Illinois State University
- Phosphorus Runoff Potential in Fields with Minimal Slope, University of Illinois
- Keep It for the Crop (KIC), and education and outreach program that seeks to educate the agricultural sector on improving nutrient stewardship
- Discovery Farms ~~iscovery Farms~~, a program that will coordinate farm demonstration projects with ~~university~~ science based research results to identify and disseminate workable best management practices

For details on all NREC projects, visit www.illinoisnrec.org.

~~*Keep it for the Crop*~~

Keep it for the Crop (KIC) Education and Outreach Program

The KIC Education and Outreach Program is the Illinois Council on Best Management Practices' (CBMP) comprehensive, collaborative program for science based outreach and education designed to promote enhanced nutrient stewardship and implementation of voluntary agricultural best management practices (BMPs) to reduce nutrient losses and improve water quality. The program will consist of four different aspects: Education, Training, Demonstration and Communication to meet the following objectives.

1. Information – Gather the most up to date and accurate information about the effectiveness of BMPs to improve water quality and other natural resources and the programs available to assist with adoption.
2. Awareness – Increase awareness of water quality and other natural resource issues, as well as the effectiveness and economic viability of adopting BMPs.
3. Participation –Increase farmer participation in available nutrient management, water quality and conservation programs and increase the adoption of BMPs to improve water quality and other natural resources.

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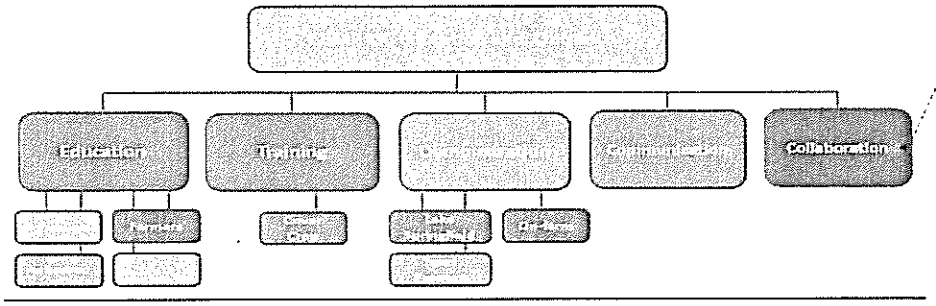
4. Demonstration – Using the Nutrient Loss Reduction Strategy as a guide to demonstrate and track adoption of BMPs within the eight targeted watersheds where CBMP has resources.



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KIC, ~~established by the Council on Best Management Practices in January 2012~~, ~~works in~~ will focus on the eight priority watersheds designated by Illinois EPA as being impaired due to nitrate-nitrogen, total phosphorus, or both: Lake Springfield, Lake Evergreen, Lake Bloomington, Lake Vermilion, Salt Fork Vermilion River, Vermilion River-Illinois Basin, Lake Decatur, and Lake Mauvaise Terre. ~~KIC engages agricultural retailers and their farmer customers in systematically managing nutrients throughout the growing season rather than as a single nutrient application. This helps to reduce the likelihood of nutrient losses from surface or sub-surface movement and can improve yields by keeping these nutrients available for crop uptake.~~

KIC receives its primary financial support from NREC for its education, outreach, and research-based components. CBMP utilizes and supports the following programs and tools. ~~to better educate farmers on the nitrogen cycle, nutrient uptake, and optimum nitrate-nitrogen rates for individual fields:~~

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- ~~Nitrogen management systems~~
- ~~N-WATCH®~~
- ~~On-farm nitrogen rate trials~~
- ~~N-Calc (Maximum Return to Nitrogen calculator)~~

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~~These tools are components of the 4Rs of nutrient stewardship: right source, right rate, right time, right place. The 4R program is a nationally recognized nutrient~~

Formed in 1998, the Illinois Council on Best Management Practices (CBMP) is a non-profit entity made up of dues-paying member organizations, including the Illinois Corn Growers Association, Illinois Farm Bureau, Illinois Soybean Association, Illinois Fertilizer & Chemical Association, Illinois Pork Producers Association, Syngenta Crop Protection, Monsanto, and GROWMARK. CBMP's mission statement is working to assist and encourage adoption of best management practices (BMPs) to protect and enhance natural resources and the sustainability of agriculture in Illinois.

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~~framework developed by the International Plant Nutrition Institute that can be customized to different cropping systems, soil types, and climatic conditions. KIC also coordinates the on-farm nitrate nitrogen rate trials, N-WATCH soil samples, and observations of crop response with the University of Illinois Department of Crop Sciences to ensure proper analysis of the results and dissemination of the findings through University of Illinois Extension publications.~~

~~KIC receives financial support from NREC for its education, outreach, and research-based components.~~

Cover Crop Training Initiative

Cover Crop Training Initiative uses regional cover crop specialists to provide training, education, and outreach to promote the use of cover crops for nutrient management in production agriculture. During this three-year program, CBMP, with financial assistance from the National Fish and Wildlife Foundation (NFWF), NREC and the Zea Mays Foundation, will train ~~three~~ four regional cover crop specialists on how to establish cover crop demonstration sites and work with agricultural retailers, SWCDs, and IDOA to identify farmers statewide. Cover crop specialists will provide training sessions and work with farmers to encourage them to incorporate cover crops into their farming operations and to help them chose the best implementation strategy for their farm.

Agriculture departments at community colleges across Illinois are partnering on this initiative by providing trainers and training sites. Cooperation and communication among multiple participating community colleges will establish a network for agricultural education and outreach in Illinois and expand the impact of this program.

Lake Springfield Watershed Project

CBMP, with funding from Springfield City Water, Light & Power (CWLP) and NFWF, is engaged with Lake Springfield watershed partners, including the Sangamon County SWCD, on a program to measure stream quality and work with agriculture retailers and farmers to adopt management systems and BMPs that will ensure that nitrate levels in Lake Springfield remain consistently below the 10 ppm drinking water standard.

Demonstration Farms Partnership

This program will support and coordinate the efforts of several demonstration site programs, including CBMP's Demonstration Farms sites, CBMP's NFWF Cover Crop Training demonstration sites and Soil Health Partnership sites. All of these programs seek to add edge of field water quality monitoring to farm scale demonstration sites that have implemented one or more BMPs to improve nutrient management, water quality or soil health. The Illinois Demonstration Farms Partnership program will support the continuation and establishment of water quality monitoring on these Demonstration Farms. Those include both row crop and livestock production, to evaluate the impact of a variety of BMPs, such as nitrogen management, cover crops, conservation tillage, drainage water management and others, on farm operations, soil health, water quality and other sustainability metrics. By collaborating and sharing technical expertise, educational and promotional resources, and in-field personnel, the effectiveness and

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impact of all of these programs will improve, providing even more support to Illinois farmers in making BMP implementation decisions.

Keep it 4R Crop Program

The Illinois Fertilizer and Chemical Association's 4R Nutrient Stewardship Program focuses on education and in-field work with ag retailers and their farmer customers to support fertilizer management practices focusing on right source, right rate, right time and right place. This program engages retailers to work directly with their farmer customers on practices in individual fields to minimize environmental impact, optimize harvest yield and maximize input utilization. This program is funded by the fertilizer industry and supports on-farm nitrogen rate trials, N-WATCH, managing nitrogen as a system and phosphorus placement trials in areas of the state where P losses are an issue. All protocols for these on-farm trials are provided by the University of Illinois Crop Sciences. With permission of the farmer, results are shared with the U of I to continually feed the Maximum Return to Nitrogen rRate cCalculator (MRTN). This enables UI researchers and extension specialists to utilize information gained from theses in-field practices to educate growers on nitrogen and phosphorus management issues via webinars, CCA sessions, extension meetings and publications.

N-rate Trials & N-WATCH Nitrogen Testing Program

Using the MRTN (Maximum Return to Nitrogen) calculator is a key activity and must continually be reviewed and updated with new information to assure it remains current and relevant to the industry. The purpose of an N rate study is to expose the farmer and his Ag retail agronomist to what rate of N was actually needed for the corn crop. N-WATCH soil testing is to be used as another engagement tool to expand education and outreach and to also help farmers understand the movement of nitrogen in the soil and to increase farmer adoption of the enhanced nutrient management and other BMPs. Pre and post N-WATCH surveys will be completed throughout the project with cooperators to show changes in nutrient practices and results will be reported in aggregate by a watershed or, in some areas, a sub watershed level. Farmers will be encouraged to follow up with additional resources to learn more about BMPs and will be given referrals to other programs.

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~~KIC receives financial support from NREC for its education, outreach, and research-based components.~~

Non-Profit Programs and Projects

The Nature Conservancy in Illinois

For more than 20 years, The Nature Conservancy (TNC), in conjunction with researchers at the University of Illinois, has worked with partners along the Mackinaw River watershed in central Illinois to reduce nutrient pollution through the targeted implementation of BMPs. These efforts have yielded three projects. The first used targeted outreach to encourage local agricultural producers to implement BMPs and identified the barriers preventing producers from doing so. Water monitoring that accompanied BMP implementation in these watersheds indicated that surface BMPs such as grassed waterways did not effectively reduce the nutrient loads carried by subsurface tile drainage. However, a pilot study on a nearby experimental farm did indicate that treatment wetlands that intercepted tile drains removed approximately 19-48 percent of nitrate-nitrogen and 47-57 percent of the total phosphorus from water. Consequently, TNC is pursuing a new initiative with industry, state, federal, and non-profit partners to strategically place treatment wetlands throughout targeted watersheds in the Mackinaw River Basin. This project will not only reduce the amount of nutrients leaving the state but will also contribute to safe drinking water for the City of Bloomington.

> The Nature Conservancy is an international conservation organization working to protect endangered lands and waters around the world. Their efforts at the local and state level have played an important role in reducing both nutrient runoff and loading in Illinois streams and rivers.

TNC is also reestablishing functional floodplains at two model restoration projects along the Illinois River: the 2,000-acre Spunky Bottoms Project in Brown County and the 6,600-acre Emiquon Project in Fulton County. While the main purposes of these projects are restoring and sustaining natural plant and animal communities and contributing to the health of the Illinois River, reestablishing natural floodplain habitats and ecological processes will provide water quality improvements. Wetland processes contributing to improved water quality include denitrification, sequestration of phosphorous in sediments, sediment cycling, and the breakdown of other pollutants. In addition, these projects will improve groundwater recharge, stormwater storage, carbon sequestration, and opportunities for education, recreation, and compatible economic development. Based on a wide variety of ongoing scientific research and monitoring, lessons learned at these sites are being shared broadly and are influencing restoration and management of other large floodplain rivers locally, regionally, nationally, and internationally.

Illinois Buffer Partnership

The Illinois Buffer Partnership is a statewide program that promotes and showcases the voluntary efforts of farmers, landowners, and communities to plant, maintain, and enhance

conservation buffers that reduce soil erosion, improve water and soil quality, and provide wildlife and pollinator habitat. The program is led by Trees Forever in partnership with CBMP, Syngenta, GROWMARK, state and federal government agencies, and other private donors.

> Trees Forever is a non-profit organization in Iowa and Illinois whose mission is to plant and care for trees and the environment by empowering people, building community, and promoting stewardship. For more information, visit www.treesforever.org.

Between 10 and 20 Illinois Buffer Partnership participants are eligible annually to receive cost-share assistance, on-site assistance from Trees Forever field staff, project signs, and the opportunity to host a field day to highlight their project. Conservation practices eligible for the Illinois Buffer Partnership include: riparian buffers, livestock buffers, stream bank stabilization, wetland development, pollinator habitat, rain gardens, and agroforestry.

Since its inception in 2000, the Illinois Buffer Partnership has provided assistance to more than 200 demonstration projects across the state. Over 4,000 acres of conservation buffers have been planted, protecting more than 52 miles of Illinois streams. To date, 1,460 landowners and volunteers have planted 886,682 trees and shrubs and contributed 25,429 volunteer hours to site establishment, planting, and maintenance to make these conservation projects successful.

Nutrient Loss Reduction Best Management Practices

Practices to Reduce Nitrate Losses from Row Crop Areas

Fertilizer Application

Changes in nitrogen fertilizer application practices could significantly reduce nitrate-nitrogen losses. Effective application practices include applying nitrogen fertilizer according to the Maximum Return to Nitrogen (MRTN) rate, using nitrification inhibitors for fall-applied fertilizers, applying fall fertilizer after the soil temperature 4-in deep falls below 50° F, switching from fall to spring applications, and splitting fertilizer applications to align with when plant uptake is greatest. All of these recommended practices are currently used throughout Illinois and, in most cases, the necessary technology, equipment, and management experience are widely available. Some of these practices may also result in cost savings for producers and higher crop yields.

> The goal of the Illinois NLRS is for farmers to select and apply the most beneficial practices for any given field. These practices are based on the science assessment and are those deemed by the Illinois Nutrient Loss Reduction Strategy Policy Working Group to have the greatest potential impact. This does not represent all practices that could result in nutrient loss reduction. The specific suite of practices appropriate for any given field will depend on many factors including soil characteristics, landscape position and hydrology, and current cropping and management practices.

Cover Crops

Cover crops effectively reduce both nitrate-nitrogen and total phosphorus losses while also improving soil tilth and other important properties. Illinois farmers currently plant 319,000 acres of cover crops. The adoption of cover crops as a routine management practice may provide the best means of achieving large reductions in nutrient losses, particularly in the southern two-thirds of the state. Successful transitioning to a cover crop system will require constant improvements in all aspects of management systems.

> The conservation practices identified in this strategy for row crop and livestock operations, as well as additional practices, are eligible practice standards supported by NRCS conservation programs.

Edge-of-Field Practices

Edge-of-field practices, such as bioreactors and end-of-tile wetlands, are highly-effective at removing nitrates and have low long-term costs. However, they can have significant installation and maintenance costs, as well as the lost value of the land that would otherwise have been planted and harvested. Installation of these practices to date has been limited to research and demonstration projects. Buffers may provide some limited reductions in nitrate losses where shallow groundwater flows through the active root zone beneath the buffer but will not affect water flowing through a tile drain.

Table 6.1. Example statewide results for nitrate-nitrogen reductions by practice/scenario with shading to represent in-field, edge-of-field, and land use change practices or scenarios*.

Practice/scenario	Nitrate-N reduction per acre (percent)	Nitrate-N reduced (million lb)	Nitrate-N reduction from baseline (percent)	Cost ($/lb removed)
Reducing N rate from background to MRTN on 10 percent of acres	10	2.3	0.6	-4.25
Nitrification inhibitor with all fall-applied fertilizer on tile-drained corn acres	10	4.3	1	2.33
Split application of 50 percent fall and 50 percent spring on tile-drained corn acres	7.5-10	13	3.1	6.22
Spring-only application on tile-drained corn acres	15-20	26	6.4	3.17
Split application of 40 percent fall, 10 percent pre-plant, and 50 percent side dress	15-20	26	6.4	
Cover crops on all corn/soybean tile-drained acres	30	84	20.5	3.21

Practice/scenario	Nitrate-N reduction per acre (percent)	Nitrate-N reduced (million lb)	Nitrate-N reduction from baseline (percent)	Cost ($/lb removed)
Cover crops on all corn/soybean non-tiled acres	30	33	7.9	11.02
Bioreactors on 50 percent of tile-drained land	40	56	13.6	1.38
Wetlands on 25 percent of tile-drained land	40	28	6.8	5.06
Buffers on all applicable crop land (reduction only for water that interacts with active area)	90	36	8.7	1.63
Perennial/energy crops equal to pasture/hay acreage from 1987	90	10	2.6	9.34
Perennial/energy crops on 10 percent of tile-drained land	90	25	6.1	3.18

**See chapter 3 for a discussion of producer costs to implement these practices.*

Practices to Reduce Total Phosphorus Losses from Row Crop Areas

Fertilizer Application

Applying phosphorus fertilizers only when soil tests indicate total phosphorus levels are below Illinois Agronomy Handbook (University of Illinois, 2012a) recommendations is a key way to reduce total phosphorus losses across the state. Producers currently applying above these levels could also realize significant cost savings by implementing this practice. A University of Illinois Extension and industry initiative to increase awareness among producers, landowners, and advisers such as farm managers of crop needs and soil phosphorus levels could be very beneficial. A review of standard farm lease agreements for opportunities to address this issue and nutrients in general may also be helpful.

Tillage

The science assessment (chapter 3) shows the benefits of a renewed effort to reduce soil erosion losses on cropland with erosion rates greater than soil loss tolerance. Reductions in tillage intensity to leave greater amounts of crop residue on the surface after planting may result in less soil erosion and thus less phosphorus loss, as well as fuel savings to producers. However, the availability of appropriate planting equipment may limit adoption by small-acreage producers.

Edge-of-Field Practices

On fields with steep slopes and areas where ephemeral gullies form, water and sediment control basins have been shown to trap about 90 percent of sediment. Properly designed and maintained grassed waterways and other buffers such as filter strips are also effective in reducing sediment and total phosphorus delivery to streams and should be targeted to areas with relatively high sediment delivery rates.

Table 6.2. Example statewide results for total phosphorus reductions by practice/scenario with shading to represent in-field, edge-of-field, and land use change practices or scenarios*.

Practice/scenario	Total P reduction per acre (percent)	Total P reduced (million lb)	Total P reduction from baseline (percent)	Cost ($/lb removed)
1.8 million acres of conventional till eroding >T converted to reduced, mulch, or no-till	50	1.8	5	-16.6
P rate reduction on fields with soil test P above the recommended maintenance level	7	1.9	5	-48.75
Cover crops on all corn/soybean tile-drained acres	30	4.8	12.8	130.4
Cover crops on 1.6 million acres eroding >T currently in reduced, mulch, or no-till	50	1.9	5	24.5
Wetlands on 25 percent of tile-drained land	0	0	0	
Buffers on all applicable crop land	25-50	4.8	12.9	11.97
Perennial/energy crops equal to pasture/hay acreage in 1987	90	0.9	2.5	102.3
Perennial/energy crops on 1.6 million acres >T currently in reduced, mulch, or no-till	90	3.5	9	40.4
Perennial/energy crops on 10 percent of tile-drained land	50	0.3	0.8	250.07

**See chapter 3 for a discussion of producer costs to implement these practices.*

Practices to Reduce Nutrient Losses from Livestock Production

Manure Application

Livestock production does not contribute large volumes of nutrients to Illinois surface waters or the Gulf of Mexico. At the local level, however, livestock manure may be a significant source of total

These practices can be a part of either formal or informal comprehensive nutrient management plans. Although these plans are often voluntary or are not routinely evaluated by a regulatory agency or a third-party evaluator, their development and use should be expanded throughout the livestock industry. These practices should be carefully followed to increase the levels of successful manure management and nutrient loss reduction from livestock facilities in the state.

phosphorus. There are a number of appropriate manure application management practices available to producers, including:

- Applying manure at agronomic rates based on University of Illinois and USDA NRCS guidelines
- Injecting or immediately incorporating applied manure into the soil to minimize the potential for manure off-site movement
- Avoiding manure applications when precipitation is anticipated within 24 hours
- Following the appropriate application setback (as statutorily defined) when applying manure in critical areas
- Avoiding or minimizing manure applications to snow-covered or frozen areas

Stormwater Runoff

Runoff from livestock feeding areas, feedlots, loafing areas, milking parlors, and other production areas can be highly nutrient-enriched and, if not managed appropriately, can flow into surface depressions or small ditches, which can lead to surface water nutrient contamination. Nutrient loss can be reduced in these areas through runoff management practices, including:

- Using clean water diversions whenever possible to keep uncontaminated water from coming into contact with manure
- Scrapping lot areas daily and removing and storing the resulting manure in an area protected from precipitation
- Collecting runoff from animal feeding and loafing and appropriately disposing of it via land application, treatment wetlands, filter strips, or other practices intended to keep runoff at the treatment site
- Treating silage leachate, milkhouse waste, or other liquids that have come into contact with manure as manure and storing it until conditions are appropriate for land application
- Protecting feeding areas whenever possible from precipitation to minimize the amount of feed lot runoff that must be managed

Pastures and Grazing

The appropriate management of pasture or grazing-based livestock production can minimize nutrient losses from production areas by eliminating uncontrolled livestock access to streams and drainage ways, maintaining areas that receive heavy use and high traffic, providing shade and watering sources away from streams and waterways, and maintaining healthy grass stands that reduce nutrient runoff.

USDA NRCS standards directly associated with livestock nutrient management include, but are not limited to:

- Nutrient Management (590)
- Feed Management (592)
- Waste Storage Facility (313)
- Heavy Use Area Protection (561)
- Roof Runoff Structure (558)
- Spring Development (574)
- Watering Facility (614)
- Water Well (642)
- Access Control (472)
- Vegetated Treatment Area (635)

Feed

Livestock producers can mitigate the potential loss of total phosphorus through manure by reducing the

phosphorus content animal feeds. Formulating diet rations consistent with University of Illinois recommendations can, in some cases, reduce the total phosphorus content of the resulting manures.

Future Regulatory Actions

IDOA, in consultation with the Water Quality Partnership Forum established by this strategy (discussed below), will evaluate the state's existing fertilizer and related nutrient non-point regulatory framework to identify potential gaps and develop possible remedies for future stakeholder consideration.

Future Strategic Actions

Expanded Outreach and Education

Promotion of nutrient loss reduction practices like those identified in this strategy will be expanded by public, private sector, academic, and non-profit entities. Education and outreach efforts will be tailored to the needs of specific watersheds or counties and will focus on the most appropriate nutrient loss reduction practices.

Educational efforts will expand to further target programs for technical assistance providers, including local, state and federal agency staff, and private sector advisors such as certified crop advisors and farm managers.

Agricultural producers as well as non-resident landowners will be provided information on the impacts of nutrient losses on water quality and practices to reduce those losses. State and federal agencies as well as CBMP members and its individual farmer member organizations will actively engage in outreach to educate farmer members on the Illinois Nutrient Loss Reduction Strategy (Illinois NLRS or the strategy) and the tools available to farmers to implement changes in individual watersheds or regions of the state. Educating landlords is particularly important for those practices that do not provide any direct economic return to the producer or tenant in the short run, such as wetlands, buffers, and bioreactors.

The Illinois NLRS will also be discussed in county and watershed meetings led by CBMP. Producers will be given opportunities to voluntarily implement practices that will reduce nutrient losses. Increased incentive-based programs are being developed and implemented by all of the stakeholders involved in developing the strategy. Many of the partners already have developed or are developing such programs (e.g. KIC ~~2025~~, MOM, MRBI, NWQI, and others).

Based on the results of the watershed prioritization process (see chapter 4), Illinois EPA will prioritize financial support for groups to develop watershed plans that lead to voluntary and incentive-based implementation of the strategy and encourage partners to provide additional funding or other resources where possible.

Non-traditional approaches and means of reaching target audiences should also be pursued. For example, soil testing labs may be able to highlight soil test values above optimal. Developing and implementing new approaches for the delivery of nutrient management

information to absentee landowners should also be pursued to ensure that both the farm operator or manager and the land owner are adequately informed about these issues and the importance of appropriate nutrient management on the lands they control.

Agricultural Water Quality Partnership Forum

An Agricultural Water Quality Partnership Forum will be formed to steer, coordinate, and assign responsibilities for delivering outreach and education required to involve individual farmers in addressing nutrient losses. The partnership will include high-level officials from relevant agencies and organizations. Tasks for this group will include:

- Strengthening connections between industry initiatives, continuing education requirements for certified crop advisors, state programs, and other technical service providers to raise visibility of programs and help producers evaluate and select the most appropriate BMPs
- Identifying necessary education initiatives and assigning their development to the appropriate organization
- Coordinating and align priorities for funding BMP implementation
- Reaching a consensus on whether Illinois should pursue an Ag Water Quality Certification program, either statewide or in pilot areas, that would encourage voluntary adoption of BMPs

If a certificate program were to be established, the partnership would be responsible for developing a timeline and program implementation plan. The partnership would also identify the training requirements and authorization necessary for technical advisors and certified crop advisors to provide water quality certifications for producers, if such a program is developed, and would be required to develop a timeline and implementation plan.

Supporting Watershed-Specific Practices

Although even small reductions in nitrate-nitrogen and total phosphorus losses from agricultural lands will move us closer to the overall reduction goals, limited public and private resources require that efforts be targeted to areas with the greatest nutrient losses and make use of the most cost-effective practices. Prioritization of financial assistance to support the adoption of the most effective and efficient nutrient loss reduction practices will be critical to the success of existing programs. Management mechanisms such as the NRCS State Technical Committee must be used to help target support programs that can help reduce nutrient losses while still addressing traditional program goals. State and federal agencies should provide incentives or financial assistance for the adoption of nutrient loss reduction practices that have been shown to effectively reduce nitrate-nitrogen and total phosphorus in the peer-reviewed literature.

Continued Research

Continued research is needed to ensure that that BMPs supported by this strategy are the most effective and cost-efficient. Future research should focus on three broad topics: management techniques, obstacles to adoption, and improved practice targeting. At the county or small watershed level, additional tools are also needed to make it possible to target local efforts to specific sub-watersheds and fields with high-risk conditions. For example, soil survey

Daniels, Simon

From: Gary Cuneen <gary@sevengenerationsahead.org>
Sent: Friday, January 23, 2015 3:14 PM
To: Daniels, Simon
Subject: Public Comment
Attachments: ifscPublicCommentIEPA.pdf; Illinois Food Scrap Coalition Membership.pdf

NLRS
PC-845

Please find attached public comment on the Illinois Nutrient Loss Reduction Strategy Report.

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Seven Generations Ahead
Founded in 2001, Seven Generations Ahead's mission is to promote the development of ecologically sustainable and healthy communities. SGA works with local government, community and private sector leaders to help communities make the changes they need to create a healthy and sustainable future. Through community-wide sustainability planning and implementation, educational conferences and consulting, and school-based zero waste and farm to school programming and consulting, SGA is a catalyst for local community solutions to global environmental issues. SGA's planning, implementation, education, and consulting work covers a broad range of sustainability topic areas, including: energy efficiency and renewable energy; transportation; community development; waste reduction; water conservation; green business development; local, sustainable food; open space and ecosystem enhancement; and sustainability education.

January 20, 2015

To the Illinois Environmental Protection Agency,

The Illinois Food Scrap Coalition (IFSC) respectfully provides the following comment to the *Illinois Nutrient Loss Reduction Strategy* report that seeks to improve water quality in Illinois and eliminate dead zones in the Gulf of Mexico. The IFSC applauds the breadth of strategies contained within the report, but cautions that the report overlooks the use of compost as a technology to mitigate erosion and replace synthetic chemical fertilizers. The application of compost as a soil amendment would positively impact water quality and the resulting dead zones.

Considering that a major source of nitrates come from synthetic chemical fertilizers, it is prudent to look at strategies that do not contaminate water supplies in the first place. Fertilizers are used to provide crops with nutrients that benefit growth and can be applied in various ways. Compost as a soil amendment provides nutrients such as nitrogen and phosphorus to crops without the risk of runoff that contaminates waterways.

Compost adds value as a technology to reduce nutrient loss by its ability to increase nutrient levels available to plants, thereby decreasing the need to use synthetic fertilizers. The high organic matter content in compost can reduce irrigation needs and risk of runoff through its ability to retain water. The nutrients and water provided by compost can replenish Illinois soils on farms, municipal and private sector landscaping projects, and home garden applications from material that already exists in the State while improving water quality in the process. With the Illinois ban on landscape waste going to landfill, it is logical to use the material generated to supplement Illinois' cropland.

In addition to the strategies outlined in the report, the IFSC recommends the use of compost to amend soil as a best management practice and technology, and as a viable, long-term solution to contamination. The right time and place to rebuild the valuable agricultural industry that sustains our State is now. The need to ensure the environmental and economic success of future endeavors is great.

The following is a list of resources with documentation supporting the use of compost for healthy soil, water retention in soil, decreased erosion and cleaner runoff:

- *Quantifying Benefits Associated with Land Application of Organic Residuals in Washington State*
  pubs.acs.org/doi/abs/10.1021/es2010418
- *Changes in Soil Properties and Carbon Sequestration Potential as a Result of Compost or Mulch Application: Results of On-farm Sampling*
  faculty.washington.edu/slb/docs/SBrown_compost_farmsoils_final.pdf
- *Effects of Biosolids Based Soil Products on Soil Physical and Chemical Properties in Urban Gardens*
  tandfonline.com/doi/abs/10.1080/1065657X.2012.10737049#.VLae7ivF8pg
- *Seattle Soils for Salmon: Integrating Stormwater, Water Supply, and Solid Waste Issues in New Development and Existing Landscapes*
  soilsforsalmon.org/pdf/SoilsforSalmonLIDrev9-16-04.pdf

Thank you for your consideration,
Illinois Food Scrap Coalition | illinoiscomposts.org

Illinois Food Scrap Coalition Membership - January 2015

AFFILIATION	FIRST	LAST	POSITION
Founding Members			
Cook County	Christopher	Lipman	Solid Waste Coordinator
DCEO/Task Force Chairman	David	Smith	IL Energy Office – Recycling Programs
DuPage County	Shefali	Trivedi	EDP
Kane County/IRA Board Member	Jennifer	Jarland	Recycling and Resource Conservation Program Coordinator
Kendall County, ILCSWMA Board Member	Marlin	Hartman	Solid Waste Coordinator
Loyola University	Hanh	Pham	Compost Coordinator
SCARCE	Kay	McKeen	Director
Seven Generations Ahead	Gary	Cuneen	Executive Director
Seven Generations Ahead	Jen	Nelson	Zero Waste Program Manager
SWALCO, SWANA President/Task Force Appointee	Walter	Willis	Executive Director SWALCO, SWANA IL Chapter President
SWANA/Village of Oak Park	Karen	Rozmus	Board Member/Environmental Services Manager
SWANCC	Cameron	Ruen	Graphic Designer and Marketing Coordinator
SWANCC/ILCSWMA Board Member	Mary	Allen	Recycling and Education Director
SWANCC/Task Force Appointee	David	Van Vooren	Executive Director
USEPA Region 5	Julie	Schilf	Environmental Scientist - Land and Chemicals Division
Will County/SWANA Board Member	Dean	Olson	Division Director - Will County Land Use
	Pat	Dieckhoff	Sustainability Specialist
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Beyond Green	Greg	Christian	CEO
BrightBeat Consulting	Stephanie	Katsaros	Consultant
CB&I	Michelle	Spruth	Project Manager
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Chicago Conservation Corp (C3)	Patrick M.	Weaver	Community Leader

Chicago French Market	Marian	Jarocki	Director of Leasing and Marketing
Chicago Growing Community	Jesus	Martinez	Chef
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City Colleges of Chicago	Amanda	Smith	Sustainability Coordinator
City of Elgin	Dan	Ault	
City Of Monmouth	Chad	Braatz	Sustainability Coordinator
Collective Resource	Erlene	Howard	Owner
Compost Supply	Lynn	Herlien	Owner
creative werks, llc	Colleen	Coyle	Manager of Corporate Social Responsibility
Decatur DIG	Sue	Hemp	
DeKalb County Community Gardens	Dan	Kenney	Executive Director
Eagle Enterprises Recycling, Inc.	Adam	Jaquet	Vice President
Eisenmann Corporation	Kyle	Goehring	Regional Sales Manager
EISENMANN Corporation	John	McDowell	Sales Manager
Elevate Energy	Bethany	Olson	
Elgin Sustainability Commission/IL Environmental Council	David	Segel	Member / Board Member
Elmhurst College	Mark	Wakely	Services Manager
Environmental Stewardship and Energy	Duane	Friend	Educator
Feed Earth Now	Cathy	Scratch	Founder and CEO
Flood Brothers Disposal	Bill	Flood	
Flood Brothers Disposal/Recycling Services	Bobby	Flood	
Flood Brothers Disposal/Recycling Services	Michael J.	Flood	
Garden Prairie Organics	Michael	DiMucci	
Golder Associates	Heather	Powell-Olson	Senior Project Manager
Goose Island Beer Co.	Ian M.	Hughes	Assistant Brewery Manager
Greeley and Hansen	Dimitri	Katehis, PhD, PE	National Director, Process Engineering
Green Chicago Restaurant Coalition	Sarah	Hidder	Development Associate
Green Chicago Restaurant Coalition	Eloise	Karlatiras	President and CEO
Green Organics, Inc.	David	Gravel	Vice President
Green SEED Energy	Judy	Freeman	
Green SEED Energy	Rennie	Heath	
Greenleaf Pack	Stephanie	Brandt	
Groot Industries, Inc.	Frank	Hillegonds	Municipal Manager
Growing Power, Chicago - Green Era Sustainability	Jason	Feldman	

Heartland Community College	Larissa	Armstrong	Associate Director of the Green Institute
IEPA	Derek	Rompot	Bureau of Land, Disposal Alternative Unit
IGEN/Heartland Community College/IRA President	Wynne	Coplea	
IGEN/Kankakee Community College	Bert	Jacobson	Dean for Environmental and Institutuional Sustainability
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Illinois Manufacturers' Association	Jerry Peck	Peck	Associate Director of Government Affairs
Illinois Retail Merchants Association (IRMA)	Rob	Kaar	Executive Vice President
Illinois State University	Paul	Walker	Department of Agriculture/Task Force Appointee
Illinois Stewardship Alliance	Wes	King	Interim Executive Director
Illinois Sustainable Technology Center	Shantanu	Santosh Pai	Waste Research Specialist
Illinois Sustainable Technology Center	Joy	Scrogum	Emerging Technologies Resource Specialist
IRA Board Member/USAgain	Carlo	Cavallaro	Director of Govt. Affairs/Senior Legal Counsel
IRMA Government Relations	Alec	Laird	
Jackson County Health Department/ILCSWMA Board Member	Kerri	Gale	Recycling Coordinator
K. Hoving Recycling and Disposal	Ken	Hoving	Owner
K. Hoving Recycling and Disposal/IRA Board Member	K.J.	Loerop	Partner
Kimmy Compost, Inc.	Kimberly	Fair	Owner
Lake County	Kathryn	Doyle	Sustainability Coordinator
Lake Street Landscape Supply	Mark	Moxley	
Lakeshore Recycling Systems	Joshua	Connell	Managing Partner
Lakeshore Recycling Systems	Joe	Zepeda	
Land of Lincoln Community College	Marnie	Record	
Leed Green Associate	Laura	Matthews	
Lewis & Clark Community College	Nate	Keener	Director of Sustainability
Loyola University	Zac	Brown	

Macon County Environmental Management Department	Laurie	Rasmus	
McCormick Place	Kevin	Jezewski	
McFarlane-Douglass	Sean	Wunderlich	Landscape Design/Construction and Exterior Sales
McHenry County College	Kim	Hankins	Director of Sustainability
Midwest Compost	Charlie	Murphy	President
Museum of Contemporary Art Chicago	Erica	Erdmann	Sr. Preparator, Exhibitions
Museum of Contemporary Art Chicago	Adrienne	Quint	Administration and Human Resources Coordinator
National Solid Waste Management Association/Land and Lakes	Mary Margaret	Cowhey	President/CEO
New Earth Compost	Joseph	Groskind	Owner
Nixon Peabody LLP	Jodi	Rosen Wine	Partner
Northern Illinois Food Bank	Jeannine	Kannegiesser	Grant Writer
NSWMA/Groot Industries	Josh	Molnar	Municipal Manager
Office of Governor Quinn	Anthony	Cefali	Dunn Fellow
Onion Pub & Brewery, Barrington	Jennifer	Kainz	Owner
Onyx	John	Hamilton	President
Organix	Andy	Taylor	National Account Executive
Prairie Land Disposal	Mary	Schweinsberg	owner
Québec Government Office in Chicago	Kerith	Iverson	Public and Governmental Affairs Officer
Republic Services	Rick	Bulthuis	
Roosevelt University	Paul	Matthews	Asst. VP Campus Planning & Operations
Roy Strom Company	George	Strom	Vice President
School of the Art Institute	Rachel	Krcmarich	Associate Dir of Administration
SCS ENGINEERS	Lori	Hamburg Edwards	Senior Project Professional
Seven Generations Ahead	Sandra	Jackson-Wood	Intern
Sierra Club	Barbara	Klipp	
Sims Recycling Solutions	Kimberly	Bell	Strategic Account Manager
Social Ecologies	Nancy	Klehm	Founder
St. Louis Composting	Tyler	Loucky	Sustainability Coordinator
St. Louis Composting	David	Gavlick	President
St. Louis Composting	Sara	Ryan	Marketing Assistant
St1 Biofuels Ltd – subsidiary of St1 Oy	Ms. Satu	Saksman	Business Development, North America

Sustainable Urban Development	Lauren	Levinson	DePaul University - grad student
SWALCO	Peter	Adrian	Recycling Coordinator
The Field Museum	Daniel	Guico	Sustainability Intern
The Plant	John	Mulrow	
The Resiliency Institute	Michelle	Hickey	Co-founder
University of Illinois at Chicago	Ning	Ai, Ph.D.	Assistant Professor, Dept. of Urban Planning and Policy
University of Illinois at Chicago	Cynthia	Kline-Banai, PhD	Associate Chancellor for Sustainability
USCC	Jim	McNelly	Co-founder
Vegware US	Craig	Schuler	Green Products Director
Vegware US	Julia	Wetstein	Compostable Products Advocate and Consultant
Waste Management	Alex	Canelo	
Waste Management	Lisa	Disbrow	
Waste Management	Matt	Hernandez	Municipal Marketing Manager
Waste Management Recycling Services	Dana M.	Lee	Recycling Account Manager
Will County	Katie	Nelson	Environmental Health Division
Will County	Joan	O'Keefe	Environmental Coordinator
Will County	Kathy	Pecora	
Will County/IRA board Member/Task Force Appointee	Marta	Keane	President of the Illinois Recycling Association
Worcester Polytechnic Institute	Dana	Valentine	ISTC Intern
Zero Percent	Rajesh	Karmani	CEO
	John	Lardner	Consultant
	Elwin	Ried	
	Jeff	Stauter	operating an in-vessel composter in Lee County
	Matthew	Zastrow	

NLRS
PC-B 406

Daniels, Simon

From: Bob Moseley <rmoseley@tnc.org>
Sent: Friday, January 23, 2015 3:29 PM
To: Daniels, Simon
Subject: IL-NLRS comments
Attachments: IL-NLRS comments from The Nature Conservancy.pdf

Attached.

Bob Moseley, Director of Conservation
The Nature Conservancy in Illinois
240 SW Jefferson St. Suite 301
Peoria, Illinois 61602 USA
309-636-3330 *desk*
312-420-3048 *mobile*
bobmoseley1 *skype*

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23 January 2015

Illinois Environmental Protection Agency, Bureau of Water
1021 North Grand Ave. East, P.O. Box 19276
Springfield, IL 62794-9276

Thank you for the opportunity to comment on the Illinois Nutrient Loss Reduction Strategy. The Nature Conservancy is a not-for-profit conservation organization with programs in more than 30 countries and in all 50 US states. Our mission is to conserve the lands and waters upon which all life depends. Water pollution from excessive nutrient loss is a global issue for people and nature, and the top priority for our North American Agriculture Program. In the US, the Conservancy has been working with agriculture, industry, and units of government to develop and implement pragmatic, effective and enduring strategies to improve water quality in nutrient-impaired systems like Chesapeake Bay, the Everglades, Western Lake Erie, and the Gulf of Mexico. As noted in the strategy (6.10), we have been working with farmers and other stakeholders in the Mackinaw River watershed for over a decade to develop and implement best management practices to reduce nutrient loss.

The draft Nutrient Loss Reduction Strategy has a number of excellent attributes. The plan provides reliable statewide estimates of N and P loading and sources, which are a critical part of the nutrient reduction strategy. The plan calls for an across-the-board change in fertilizer management using Maximum Return to Nitrogen (MRTN) calculator (Iowa State University, 2013), to optimize farm profits while reducing N application, and the plan calls for an across the board change in application timing with all fertilizer applied in the spring or during the growing season. This will reduce nitrate losses following nitrification of fall applied anhydrous ammonia, and it will also reduce fertilizer requirements because runoff losses will be less.

The plan assumed no P removal by wetlands (Table 3.14; pages 3.43-3.44). At the Franklin Research and Demonstration Farm in Lexington, IL, researchers from The Nature Conservancy and University of Illinois have been measuring the effectiveness of constructed wetlands at removing nitrate-nitrogen and dissolved phosphorus from tile-drained farmland since 2007. Because these wetlands are designed specifically to intercept and treat tile water, surface water is diverted around the wetlands through grassed waterways and wetland borders. This study has shown that wetlands representing 3% to 9% of the tile-drained farmland can reduce 57-69% of the orthophosphate loadings from drainage tiles. Kovacic et al. (2006) reported on wetlands capturing surface and tile runoff; the majority of P entering the wetlands in this study entered as surface runoff and the effective removal mechanism was probably sediment trapping. Organic P removal ranged from 42% to 76%; overall wetland organic P mass retention was 54%. Total P mass retention ranged from 40% to 79%; overall wetland total P mass retention was 53%. Hey et al. (1994) reported total P removal in the Des Plaines wetlands ranged from 52% to 99%, and a wetland designed to remove total P showed 88% removal of total P over a 2-year period (Higgins et al. 1993). Constructed wetlands that are designed specifically to capture tile-drained water, and tend to dry out during the summer when the tiles are not flowing. Many of these wetlands

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do not remain inundated throughout the year and decomposition of aquatic plants likely occurs during this dry down period. Although the eventual release of DRP from decaying wetland vegetation would likely occur at some point as stated in the IL NRLS (pages 3.43-3.44), it may take 10-15 years for this to occur in many of these tile-treatment wetlands. Research results from the Franklin Research and Demonstration Farm in Lexington, IL, has continued to show a net reduction in orthophosphorus in these tile-treatment wetlands for the last 7 years. Where high inputs of total P are a concern, wetlands can be designed to capture surface runoff (e.g., Higgins et al. 1993) and can be very effective at removing P from surface runoff (e.g., Higgins et al. 1993, Hey et al., 1994, Kovacic et al. 2006). ***We suggest that the IL NLRS policy working group consider increasing wetland removal efficiency of P to 40%***, with the caveat that wetland vegetation may need to be removed to reset the wetland system every 10-15 years. This request is based on these data that have specifically measured phosphate removal from drainage tiles by constructed wetlands in Central Illinois.

The IL NRLS draft for public comment assumed that wetlands could only be used in very limited settings, with the assumption that no more than 25% of tile-drained land could accommodate a wetland due to topographical limitations. However, wetlands can be used wherever tile lines carry water to a main that can then be intercepted and gravity-fed into a wetland. Wetland designs may vary depending on where these tile mains are located, but they are very effective at reducing N and P in tile drainage. The NRLS report also states that Illinois does not have any large tile mains that drain 1000-2000 acres; however these do exist in Illinois in many of the subwatersheds feeding into the river systems in the state. ***We suggest that the IL NLRS policy working group consider increasing this assumption of 25%.***

Overall, the IL NLRS plan diminishes the effectiveness of using wetlands to treat NPS pollution with regards to bioreactors. Cost estimates and practice life between wetlands and bioreactors need to consider that (a) wetlands have a practice life beyond 20 years, are proven practices at reducing nutrient export from agricultural lands, and require very little maintenance after initial construction, whereas, (b) bioreactors have much less capacity to treat tile drainage, have an estimated 10-15 year lifespan after which excavation is required to recharge the system with new wood chips, and do not have a proven record of effectiveness. ***Costs estimates for the effectiveness of wetlands should account for at least a 30-year practice lifespan.***

Related to the long-term efficacy of wetlands, ***we suggest inclusion of floodplain restoration as a land use change scenario towards meeting the NLRS goal***. Dee et al. (in review) estimate that N export from the Wabash River could be reduced 20% by restoring about 55,000 floodplain acres – less than 1% of the watershed. Illinois contains a very high proportion of the floodplain of the upper Mississippi River system compared to other states, suggesting floodplain restoration in Illinois could have a significant systemic effect on reducing nutrient export to the Gulf of Mexico.

Cover crop estimates of $ per lb removed of N and estimated annual costs are much lower than those in the Iowa NRS plan and those estimated by Christianson et al. (2013). ***We suggest that the IL NLRS plan***

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We suggest that the IL NLRS plan should mention potential use of promising, but under-studied edge-of field alternatives including two-stage ditches and saturated buffers, as well as the drainage water management. The Iowa NRS plan has recently updated its plan to include saturated buffers, stating 50% removal efficiency for N.

It would be helpful to ***include which practices currently provide cost-share payments under Farm Bill programs***, perhaps in the caveats that are included for each practice (Appendix B).

We suggest that the NLRS outline a strategy for increasing adoption of these practices, including how to involve certified crop advisors and agricultural retailers get involved, education opportunities, and commitments from top agricultural leaders to implement. The NLRS should have clearly articulated objectives for BMP adoption as milestones towards the 10-year goal for nutrient reduction goal, how accountability in achieving outputs (BMPs) and outcomes (lower nutrient loss) will be ensured, and how funding opportunities will be organized (e.g., revolving fund, certainty program).

The Illinois NLRS aligns well with the vision for an environmental utility, or "watershed protection utility," as outlined in the Mississippi River Nutrient Dialogues. Both the environmental utility concept and the NLRS seek to optimize nutrient loss reduction while promoting increased collaboration, research and innovation among all sectors, through voluntary action. An environmental utility would provide much needed resources for both implementation of targeted practices, as well as for monitoring to ensure resources are being targeted efficiently and progress is being made towards the ultimate goal. A broad coalition of stakeholders, including The Nature Conservancy, has been working towards the collaborative development of a potential environmental utility in Illinois, which would position Illinois as a national leader in these efforts. ***The environmental utility concept should be explicitly included in the Illinois NLRS***, and efforts to implement the Illinois NLRS should work in coordination with efforts to design a potential environmental utility.

Again, thank you for the opportunity to review and provide comment on the Illinois Nutrient Loss Reduction Strategy. The Nature Conservancy stand committed to working with all stakeholders to reach our shared goals for water quality improvements.

Sincerely,

RK Moseley

Bob Moseley
Director of Conservation

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Sincerely,

RK Moseley

Bob Moseley
Director of Conservation

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Daniels, Simon

From: Paul McNamara [redacted]
Sent: Friday, January 23, 2015 3:54 PM
To: Daniels, Simon
Subject: Comments on Illinois Nutrient Loss Reduction Strategy

NLRS
PC-847

The Illinois Nutrient Loss Reduction Strategy (INLRS) is a comprehensive document that provides Illinois with its best chance to achieve the goal of improving water quality through the reduction of nitrogen and phosphorus levels in the waters of the State of Illinois and those adjoining the State.

The INLRS creates the Nutrient Science Advisory Committee, Nutrient Monitoring Council, Agricultural Water Quality Partnership Forum, and Urban Stormwater Working Group; groups that should be able to keep the Strategy viable through the years. The Strategy stresses ongoing regulatory and voluntary efforts, creates a suite of Best Management Practices (BMP's), establishes achievable loading goals considering the length of time established for said achievement (2025).

The INLRS identifies strategies for improving collaboration among government, non-profits and industry. Defines a process for regular review and revision. Also establishes a process for measuring progress and reporting to the public.

NLRS
PC-840 B

Daniels, Simon

From: Kraft, Jacqueline - NRCS-CD, Normal, IL <Jacqueline.Kraft@il.nacdnet.net>
Sent: Friday, January 23, 2015 4:13 PM
To: Daniels, Simon
Subject: McLean County SWCD Comments on IL NLRS
Attachments: 20150123160134285.pdf

Please see attached letter.

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

McLean County SWCD
402 N. Kays Drive Normal, IL 61761
Phone: 309-452-0830 ext. 3

Warren Goetsch, Illinois Department of Agriculture
Marcia Willhite, Illinois Environmental Protection Agency
Brian Miller, Illinois Water Resource Center
NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

January 23, 2015

Dear Mr. Goetsch, Ms. Willhite, and Mr. Miller:

McLean County Soil and Water Conservation District (SWCD) appreciates the opportunity to provide our recommendations and comments on the draft Illinois Nutrient Loss Reduction Strategy (NLRS). We are proud of our long history of working with producers and agricultural landowners in our area to implement voluntary conservation to reduce nutrient loss, conserve soil, improve soil health, restore wildlife habitat, and provide other benefits.

We appreciate the tremendous amount of work that you, your staffs, and the members of the policy working group have invested in developing the draft NLRS, as called for under the Gulf Hypoxia Action Plan, to address the challenge of nutrient loss and the impacts on local and regional water quality, including hypoxia in the Gulf of Mexico. Reducing nutrient losses can also help protect local drinking water supplies, an important issue in our watershed.

The McLean County SWCD applauds the collaborative, science-based approach you have pursued that focuses on all sources of nutrient loading. Illinois has a proud legacy as a leader in pioneering practices to address agricultural nutrient pollution, from wetlands sited and designed to trap and treat tile drainage water to adaptive nutrient management. In McLean County, the Mackinaw River Drinking Watersheds Project is making important strides in addressing nutrient loss through working with farmers and agricultural landowners to enroll in the Conservation Reserve Program Farmable Wetland Program small, strategically located wetlands to intercept and treat tile drainage water. We are also working with farmers through farmer networks to examine timing and rates of fertilizer application to maximize nutrient use efficiency and reduce nutrient loss. In addition to wetlands to treat tile drainage water, the City of Bloomington is piloting other innovative practices, such as re-saturated buffers, floodplain management and stream channel stabilization to reduce nutrient and sediment losses.

We are concerned, however, that the draft NLRS appears to fail to fully recognize the demonstrated benefits of tile drainage water treatment wetlands in Illinois. First, the draft NLRS assumes that there is no phosphorus removal by wetlands (Table 3.14; pages 3.43-3.44). However, in our experience, we are seeing that wetlands can provide phosphorus removal benefits. At the Research and Demonstration Farm in Lexington, IL, researchers from The Nature Conservancy and University of Illinois have been measuring the effectiveness of constructed wetlands at removing nitrate-nitrogen and dissolved

phosphorus from tile-drained farmland since 2007. Because these wetlands are designed specifically to intercept and treat tile water, surface water is diverted around the wetlands through grassed waterways and wetland borders. This study has shown that wetlands representing 3% to 9% of the tile-drained farmland can reduce 57-69% of the orthophosphate loadings from drainage tiles. Research results from the Research and Demonstration Farm in Lexington, IL, have continued to show a net reduction in orthophosphorus in these tile-treatment wetlands for the last 7 years.

In addition, although the draft NLRS recognizes that wetlands are effective in removing nitrogen, we believe that it should use a higher nitrogen removal efficiency number. Monitoring data is showing that these small (typically a 1/2 acre to 2 acre) wetlands that trap and treat tile drainage water have a strong track record of nitrogen removal that would justify increasing the nitrogen removal efficiency to at least 45% (see also Kovacic et al. 2000, 2006).

We believe that the draft NLRS is also unduly pessimistic regarding the placement of these wetlands. The Iowa CREP wetlands have more narrow parameters for wetland siting because they rely upon placement of the wetland in riparian areas that have a sufficient degree of fall or slope. In contrast, the Mackinaw River Drinking Watershed Project wetlands are small wetlands that can be placed in virtually any location in which 1) tile can be intercepted and 2) there are hydric or clay soils appropriate for constructing wetlands.

The cost effectiveness of constructed wetlands that treat tile drainage water appears to be underestimated in the draft NLRS. These wetlands are designed to have a practice life that far exceeds 20-years. In a study of cost-effectiveness of tile drainage treatment wetlands, economists from USDA Farm Service Agency conservatively used a 50-year practice life (Iovanna, et al. 2008). Also, we question whether the 20-year practice life for bioreactors may be overly optimistic under some circumstances.

Finally, we urge you to retain flexibility in the NLRS to recognize exciting new practices, such as re-saturated buffers, as they are developed. As discussed above, we are working with the City of Bloomington to pilot, and monitor the effectiveness of, innovative practices, like re-saturated buffers, floodplain restoration, and stream channel stabilization.

Thank you for your consideration of our comments.

Sincerely,

Mike Kelley

Mike Kelley, Chairman
McLean County Soil and Water Conservation District

Daniels, Simon

From: Jack McCormick[redacted]
Sent: Friday, January 23, 2015 5:07 PM
To: Daniels, Simon
Subject: Comments Supporting the NLRS

NLRS
PC-849

Dear Illinois EPA Comments,

I am an Illinois farmer and a member of Illinois Farm Bureau. I appreciate the Illinois Environmental Protection Agency and Illinois Department of Agriculture's lead in developing the Nutrient Loss Reduction Strategy. As a farmer, I want to make sure the nutrients I apply to my fields are efficiently used by the crops. On my farm, I use best management practices to care for the land and water to preserve both for my future generations. Current efforts by Illinois farmers have helped us learn how to implement practices to reduce nutrient losses, and we are always looking for new ways to improve the way we use nutrients on our farms. I appreciate that the Strategy continues to focus on the use of education, outreach and voluntary, incentive-based practices to address the agricultural issues. Nutrient use and its impact on water quality are complicated, and widespread adoption of necessary best management practices can result from the use of such tools. As a farmer, I take great pride in my work and in caring for the environment. I am committed to the continued use of best management practices to implement the concepts discussed in the Strategy.

Sincerely,

Jack McCormick
[redacted]

Daniels, Simon

NLRS
PC-898
850

From: Rick Twait <rtwait@cityblm.org>
Sent: Friday, January 23, 2015 6:04 PM
To: Daniels, Simon
Cc: Rick Twait
Subject: Comments on the Draft Nutrient Reduction Strategy
Attachments: RMT NLRS comment letter20150123.pdf

Hi

Attached are comments regarding the draft nutrient reduction strategy. Developing the strategy must have involved a great deal of thought and discussion.

My comments are intended to augment the fine work your group has performed with the experiences our water department has accumulated over the last couple of decades. The City adopted a watershed based strategy to improve water quality in our drinking water supply reservoirs in the early 1990's.

I am in total agreement with the premise that water quality can best be improved though actions on the land. I think that chances of success in that endeavor are greatly improved by considering a wider array of techniques, coupled with a more flexible, adaptive, approach than is described in the draft strategy, however.

Please feel free to contact me by email or phone if you have any questions about my comments. Thank you for the opportunity to share our department's experiences with this important issue.

Rick Twait
Superintendent of Water Purification
Bloomington Water Treatment Plant
25515 Waterside Way
Hudson, IL 61748
309/434-2152

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Marcia Willhite, Illinois Environmental Protection Agency
Warren Goetsch, Illinois Department of Agriculture
Brian Miller, Illinois Water Resource Center
NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

January 23, 2015

Dear Ms. Willhite, Mr. Goetsch, and Mr. Miller:

The City of Bloomington Water Department appreciates the opportunity to provide comments on the draft Illinois Nutrient Loss Reduction Strategy (NLRS). As you know, have a long and proud history of cooperative conservation in the Lake Bloomington and Evergreen Lake watersheds. Since the early 1990s, we have worked to protect drinking water quality by addressing nutrient loss on a watershed basis. In our experience, we have learned that it is important not to restrict ourselves to one technique to address nutrient loadings. We are working with McLean County Soil and Water Conservation District, USDA and other partners to work with producers on adaptive nutrient management as well as an array of innovative edge of field practices.

We commend the long hours that were spent to develop the draft NLRS using a collaborative, science-based approach that focuses on all sources of nutrient loading, from urban point sources to rural nonpoint sources to address the challenge of nutrient loss and the impacts on local and regional water quality, including hypoxia in the Gulf of Mexico. We are concerned, however, that as currently written, the NLRS does not reflect the true value of certain edge of field practices, making assumptions that are unduly negative for some practices and unduly positive for others. Our observations are based upon our first-hand experience with implementing (and monitoring) these practices, both on City land and as a partner in the Mackinaw River Drinking Watersheds Project. This Project works with farmers and agricultural landowners to 1) enroll in the Conservation Reserve Program Farmable Wetland Program small, strategically located wetlands to intercept and treat tile drainage water; and 2) participate in a farmer network to examine timing and rates of fertilizer application to maximize nutrient use efficiency and reduce nutrient loss. On City land, we have piloted a wide array of practices, including constructed wetlands to treat tile drainage water, re-saturated buffers, floodplain management and stream channel restoration and stabilization, to reduce nutrient and sediment losses. The City is also sharing data with Illinois State University to help support their ongoing cover crop research in the watershed.

While our experience with a bioreactor showed promising results regarding nitrogen reductions, it raised troubling concerns regarding stream inputs. Our testing showed that the bioreactor was a net contributor of phosphorus and oxygen consuming compounds. In fact, the effluent testing showed a significant increase in phosphorus. We believe this raises serious questions as to the possible impacts to local rivers, streams, reservoirs and other waterbodies from the anoxic effluent if bioreactors are implemented on a wide scale basis. In addition, we question the soundness of assuming a 20-year practice life for bioreactors. In less than 10 years, we saw a significant depression from subsidence over the bioreactor in our watershed.

The City of Bloomington has operated 2 constructed wetlands to treat tile drainage water since 1997. We conducted some routine maintenance on the wetlands, but the berms and outlets are sound and the wetlands are still functioning well. We question the NLRS assumption of a 20-year practice life for

constructed wetlands. It is likely that the true practice life of these wetlands will significantly exceed 50 years. The capital investment in these wetlands should be prorated over many decades. The cost effectiveness of constructed wetlands should be significantly more attractive than is currently estimated by the draft NLRS. We note that when economists from USDA Farm Service Agency conducted a study of the cost-effectiveness of tile drainage treatment wetlands, they conservatively used a 50-year practice life (Iovanna, et al. 2008). Our experts who are conducting an on-going economic analysis of the cost effectiveness of these wetlands also estimate constructed wetland practice life far in excess of 20 years.

We are also concerned that the draft NLRS understates the nutrient reduction benefits of constructed wetlands that treat tile drainage water. The draft NLRS assumes that there is no phosphorus removal provided by constructed wetlands (Table 3.14; pages 3.43-3.44). However, at the Research and Demonstration Farm in Lexington, Illinois, researchers from The Nature Conservancy and University of Illinois have been measuring the effectiveness of constructed wetlands at removing nitrate-nitrogen and dissolved phosphorus from tile-drained farmland since 2007. Because these wetlands are designed specifically to intercept and treat tile water, surface water is diverted around the wetlands through grassed waterways and wetland borders. This study has shown that wetlands representing 3% to 9% of the tile-drained farmland can reduce 57-69% of the orthophosphate loadings from drainage tiles. Research results from the Research and Demonstration Farm in Lexington, Illinois, have continued to show a net reduction in orthophosphorus in these tile-treatment wetlands for the last 7 years. In addition, we believe that the draft NLRS should use a higher nitrogen removal efficiency number. Monitoring data is showing that these small (typically a 1/2 acre to 2 acre) wetlands that trap and treat tile drainage water have a strong track record of nitrogen removal that would justify increasing the nitrogen removal efficiency to at least 45% (see also Kovacic et al. 2000, 2006).

The draft NLRS is also appears to be unduly pessimistic regarding the total potential use of these wetlands across the landscape. We note that the Iowa CREP wetlands have more narrow siting parameters because they rely upon placement of the wetland in riparian areas that have a sufficient degree of fall. In contrast, the Mackinaw River Drinking Watershed Project wetlands are small (typically 0.5 to 2 acre) wetlands that can be placed in virtually any location in which 1) tile can be intercepted and 2) there are hydric or clay soils appropriate for constructing wetlands. These constructed wetlands have proven to be effective both within the floodplain and outside of the floodplain. As in Iowa, landowner willingness to construct such wetlands grows over time as landowners become familiar with this new practice and the incentives being offered. We are seeing interest grow as people see these wetlands out in the landscape and have the opportunity not only to learn of their effectiveness, but also of the beauty and other benefits they provide.

Finally, we urge you to incorporate new, promising practices, such as re-saturated buffers, into the NLRS. Re-saturated buffers are an important practice to include. Like constructed wetlands, re-saturated buffers are likely to offer tremendous longevity with little active maintenance. In addition, in our experience, installation of re-saturated buffers is inexpensive. It is more comparable to the cost of installing drain tile. Given the low installation and maintenance costs and the long practice life, re-saturated buffers are likely to be even more cost effective than wetlands and bioreactors. Re-saturated buffers are also of critical importance to include in Illinois' strategy because of the significant investment of state and federal dollars in riparian buffers. This practice offers an opportunity to retrofit existing buffers dramatically increase water quality benefits by providing treatment of tile drainage water that currently bypasses these buffers. We will be monitoring the performance of the re-saturated buffer we installed on City property and also note the nutrient reduction benefits documented by Dr. Jaynes (Jaynes, et. al.,2014).

As discussed above, addressing the issue of nutrient loss and impacts to local and downstream water quality will require the use of many different techniques, including pioneering new edge of field and in-stream techniques, such as stream channel restoration and stabilization and floodplain re-connectivity.

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As discussed above, addressing the issue of nutrient loss and impacts to local and downstream water quality will require the use of many different techniques, including pioneering new edge of field and in-stream techniques, such as stream channel restoration and stabilization and floodplain re-connectivity.

Only through using an array of such techniques can we address the full range of sources of nutrient loss, including sediment and nutrient contribution from unstable streams. We urge you to employ a flexible approach in the NLRS that recognizes exciting new practices as they are developed. We cannot afford to miss these exciting new opportunities.

Thank you for your consideration of our comments.

Sincerely,

Rick Twait, Superintendent of Water Purification
City of Bloomington Water Department
rtwait@cityblm.org
(309) 434-2152

NLRS
RC-[illegible]
B51

Daniels, Simon

From: Kay Anderson <KayA@americanbottoms.com>
Sent: Friday, January 23, 2015 8:01 PM
To: Daniels, Simon
Subject: Nutrient Loss Reduction Strategy Comments - American Bottoms
Attachments: Nutrient Loss Reduction Strategy Comments - American Bottoms - Jan 23 15.pdf

Please find attached our NLRS comments.

Kay Anderson
Environmental Compliance Manager
American Bottoms Treatment
1 American Bottoms Road
Sauget, IL 62201
618.337.9726
KayA@AmericanBottoms.com

AMERICAN BOTTOMS
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NLRS
PC-851

January 23, 2015

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BUREAU OF WATER
BUREAU CHIEF'S OFFICE

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East
P.O.Box 19276
Springfield, IL 62794-9276

Email
Simon.Daniels@illinois.gov

Subject: Nutrient Loss Reduction Strategy Comments

Dear Ms. Wilhite:

American Bottoms Regional Wastewater Treatment Facility (ABRTF), a municipally owned treatment facility located in the Metro-east St Louis area, serving East St Louis, Cahokia, Sauget and other local communities, offers the following comments on the Nutrient Loss Reduction Strategy (NLRS).

1. Adaptive management. We strongly support the use of adaptive management, as outlined in chapter 9 of the NLRS. The nutrient reductions targeted by the Gulf Hypoxia Task Force and the financial resources required to achieve them are enormous. Adaptive management, paired with a continued monitoring of costs and benefit, will be necessary to prevent the large scale waste of our limited environmental dollars.

2. Numeric limits- schedule. We do not support the aggressive schedule provided in Table 8.2 for the development of numeric nutrient standards. To date the state's efforts to produce numeric standards have not produced an outcome despite the thorough involvement of the state's best qualified academic researchers. Instead, we suggest that

the reductions in phosphorus discharges that will come from the strategy's early stages of implementation will provide the best possible laboratory to understand that impact of nutrients in Illinois waters and the first and best use of adaptive management in this process. We suggest that the first job of the nutrient science advisory committee should be to assess the best way to make use of this rare opportunity to see how our waters respond to reductions in phosphorus loading. Although Illinois has indicated that they must accelerate this schedule to produce numeric standards to satisfy the requirements of USEPA, we note that not all Midwestern states are making this choice in their strategies. We believe IEPA can also make the better choice of learning what it can to produce useful and effective standards for our state. Numeric standards which do not reflect the needs of the state are not a desirable legacy from the NLRS process. Regulated parties such as ourselves who have participated in this process in a good faith partnership with the Agency to move the nutrient process forward would like to feel that such cooperation is rewarded with more real progress and less regulation for regulation's sake.

3. Numeric standards – watersheds or statewide. We appreciate and concur with the strategy's recognition on pages 8.3 and 9.7 that numeric standards may be best be established on a basis other than statewide. The work of Dr. David during earlier nutrient standard rulemaking efforts supported the consideration of water-specific characteristics, such as turbidity and stream size, in determining the acceptable/unacceptable levels of nutrients.

4. Impairment listings for P/nutrients. The 303d/305b process for listing impaired waters, while improved greatly in recent years, still retains a level of subjectivity which is troubling given the impacts of an impairment listing. We and other point sources would welcome the opportunity to understand and participate more thoroughly in the refining of these procedures and determinations prior to the final step of public notice. For the purpose of linking phosphorus to aquatic life use impairment, we support the use of the diurnal DO swing, which is science based and objective. We have concerns about methods for designations of impairments for aesthetic issues that we look forward to working on with the Agency.

5. Implementation of phosphorus permit limits for point sources. Based on chapter 5 and our previous stakeholder meetings, our understanding of the implementation plan for point source phosphorus limits is has been as follows:

- MWRDGC plant permit limits reductions are anticipated
- Major municipal discharges in the highest loading watersheds (Fox, Des Plaines and Dupage/Salt Creek) are expected in the next 3-10 years.

The document also states that

"Limiting total phosphorus in NPDES permits of major municipal discharges in other watersheds in the Illinois River Basin will complete the reduction needed to meet the point source component of the national hypoxia goal." (emphasis added)

On this basis and based on discussions during the stakeholder meetings, we have understood that, outside the MWRDC, the "high loading watersheds" above, and the Illinois River Basin (which we believe is referred to as "Downstate" in Table 5.2), the strategy relies on permit limits only where there is local impairment. It has been our understanding that there is an intention in other cases to rely on the on the activities of the feasibility plan to address nutrient reductions. The feasibility plans include implementation of those nutrient reduction measures which are available with existing facilities and equipment.

However, from our meeting yesterday, it's not clear how the issuance of phosphorus permit limits will be handled outside the "high loading watersheds." We submit that over the two permit cycles of the next 10 years, it will be possible to determine whether the combination of permit limits in high loading watersheds and feasibility study efforts utilizing nutrient reductions with existing equipment outside these watersheds is sufficient. If it is not, then the need for permit limits for majors outside the high loading watersheds will be clear. We believe that it is unnecessary and premature to require those limits across the board at this point. An adaptive management approach to establishing limits is consistent with the goal of a 25 percent loading reduction by 2025.

In our meeting yesterday, a flow chart was verbally described by the Agency as to the timing of permit limits for those in high loading watersheds and with impaired waters. Such a document would be useful for conveying the Agency's plans to POTWs, whether it's included in the strategy document or developed outside of it.

6. Feasibility plans. We support the use of feasibility plans for technology-based treatment alternatives as tool for nutrient reductions in low loading watersheds where there is no phosphorus impairment. These plans have not been discussed in our stakeholder meetings as simply compliance schedules for construction of new technology. Although many POTWs will choose the installation of biological phosphorus removal as their path forward, the plan for optimizing existing operations and other means of attaining reductions should be a flexible array of options that avoids a costly "one size fits all" approach.

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8. Nitrogen reductions from point sources. The Agency stated multiple times in the clearest terms during the stakeholder meetings for the NLRS that, although nitrogen reductions can be expected to occur where biological phosphorus removal processes are used and that the Agency will count those reductions toward the strategy goals, nitrogen removal requirements will not be imposed on point sources. This is very clearly stated in the "Biological Nutrient Removal" paragraph on page 5.8. However, the prior "Nitrogen Reduction" paragraph contains some vague language regarding "potential strategic actions to reduce nitrate-nitrogen discharge levels." This language is unclear and potentially inconsistent with the Agency's statements position regarding nitrogen removal at POTWs. We request this paragraph's deletion.

9. Implementation figure. We find Figure 9.1 to be somewhat confusing as it is not always clear which way the arrows are intended to drive the process. Perhaps the figure is not essential to the document?

10. Water Quality Database. During the stakeholder meeting related to measurement and management issues as outlined in Chapter 9, IEPA staff presented some exciting information about the potential for a consolidated database of IEPA monitoring data from its current monitoring programs. The availability of the Agency's data in a queriable database similar to that provided by USGS would significantly increase the value of the Agency's data by making it more easily and more widely available. We

support the continued exploration and progress of this project. We hope its omission from the plan does not reflect its deprioritization.

11. Executive Summary. We consider the very high costs associated with the controls discussed in the plan to be one of the noteworthy points that should be included in the Executive Summary. Inclusion of the reduction goals by sector in pounds per year would also be useful for clarity and ready reference.

12. NLRS development process. Given the enormous challenge of developing this strategy with a large number of stakeholders, the Agency is to be commended for staying the course and reaching its goal of producing a strategy. In hindsight I will offer my personal view, perhaps a minority one, that limiting participants by "invitation only" is not entirely consistent with the goal of full public participation in public matters. I hope that in future similar proceedings the Agency's goal will be wider, rather than more limited, participation by affected entities. Having expressed that opinion, I will also say that I am honored by the opportunity to participate.

We look forward to working with you on future issues relating to nutrients in the Illinois water environment.

Sincerely,

Kay Anderson

Kay Anderson
Environmental Compliance Manager

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1.0 LBS **LTR** **1 OF 1**

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January 23, 2015

USPS

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East
P.O.Box 19276
Springfield, IL 62794-9276

Email
Simon.Daniels@illinois.gov

Subject: Nutrient Loss Reduction Strategy Comments

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Sincerely,

Kay Anderson

Kay Anderson
Environmental Compliance Manager

Daniels, Simon

From: Tim Kluge <TimK@sddcleanwater.org>
Sent: Friday, January 23, 2015 8:26 PM
To: Daniels, Simon
Subject: NLRS Comments
Attachments: SCN_0001.pdf

NLRS
PC-
852

Mr. Daniels,

Attached are comments from the Sanitary District of Decatur regarding the Illinois Nutrient Loss Reduction Strategy.

Tim Kluge

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Sanitary District of Decatur
501 DIPPER LANE • DECATUR, ILLINOIS 62522 • 217/422-6331 • FAX 217/423-8171

January 23, 2015

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East, P.O. Box 19276
Springfield, Illinois 62794-9276

Dear Sir or Madam,

The Sanitary District of Decatur ("SDD") is providing the comments below on the Draft Illinois Nutrient Loss Reduction Strategy, distributed on November 24, 2014. As a participant in many of the work group meetings leading to development of the strategy, we recognize the significant effort put forth by numerous stakeholders that preceded publication of the November draft. We also acknowledge the work by the Illinois Environmental Protection Agency and Illinois Department of Agriculture to prepare the draft strategy document.

The plant modifications to accomplish nutrient reductions in SDD's discharge, like discharges from other POTWs, will require a significant investment of capital funds and an increase in annual operational costs. In SDD's case these investments, the largest in more than 30 years, must be made by a user base that is not expanding and that faces substantial economic challenges including other infrastructure needs. As noted in several of the comments below, it is imperative for us that sufficient flexibility in schedules be allowed to not only address unique technological challenges presented by our discharge loads, but to devise affordable and implementable solutions.

SDD's comments addressing specific sections of the strategy are as follows:

1. The third paragraph of the Executive Summary states that the strategy "does not call for new regulations for either point or non-point sources." This statement seems incomplete in that Chapter 8 of the strategy does propose development of, and a rulemaking process for, new numeric water quality criteria or standards that would have a substantial regulatory impact on point and non-point sources.

2. On Page 1.2, the strategy includes six "overarching principles" from the Gulf Hypoxia Action Plan, one of which is to "follow adaptive management strategies." The only other discussion of adaptive management in the strategy is a short, general paragraph on Page 9.9. We suggest that the strategy include additional discussion of how an adaptive management process would be utilized during implementation. In view of the cost and time needed to implement nutrient reductions, an adaptive management process is essential and should be described for clarity.

This is especially important in light of uncertainties about how reductions in Illinois waters will lead to progress in reducing the Gulf hypoxic zone, which is the basic goal of the strategy.

3. On Page 2.1, the third paragraph indicates that "once the hypoxia-related target reduction from point sources is achieved, point source discharges will not be obligated to reduce further to address loadings to the Mississippi River." It is not clear from the wording in this paragraph whether the "target reduction," assumed to be 45 percent, is intended to be applied to individual point source dischargers or to point sources collectively, or whether the absence of future obligations for reduction apply individually or collectively.

4. On Page 2.2, the strategy states that IEPA projects that the target reduction for point source contributions of phosphorus can be met through implementation of limits in NPDES permits. Clarification of which point source discharges IEPA projects will receive permit limits is needed. Table 3.10 in the Science Assessment chapter estimates phosphorus reductions for several combinations of the number of major discharge with limits and the numeric limits. Table 5.2 shows potential reductions based on different numbers of major facilities with limits and a different discharge concentration. Due to these differing combinations of facilities and projected concentrations, clarification is needed of which major dischargers and which discharge concentration were utilized by IEPA to make the projection on Page 2.2. Also, the statement in the last sentence of the paragraph on Page 5.6 that "limiting total phosphorus in NPDES permits of major municipal dischargers in other watersheds in the Illinois River Basin will complete the reduction needed" is confusing and unclear in terms of which dischargers are intended to be included.

5. It is noted that the Upper Sangamon River watershed has been added to the list of Priority Watersheds for Point Sources on Page 4.3 since the prior version of the draft strategy. On Page 4.4, the strategy states that "Organizations in the top 10 watersheds will be notified of their status and of the need to develop a watershed-based plan that will guide the implementation of nutrient loss reduction practices." This language seems to apply primarily to non-point source discharges. Clarification is needed to describe the implications and expectations for point source dischargers located within a Priority Watershed for Point Sources.

6. Also on Page 4.4, the strategy states that "Funding provided for nutrient loss reduction activities, which will be limited to five years, will be based on the amount requested and the ability to implement nutrient loss reduction activities." It is not clear whether the five-year limitation applies to point sources, non-point sources, or both, and whether the funding or the activities will be limited to five years. As discussed in numerous places within the strategy, the nutrient loss reductions necessary to meet the targets will require far more than five years to successfully implement. The funding strategy will need to extend beyond the five-year timeframe as well.

7. In the last paragraph on Page 5.5, there is a discussion of implementation of a 1 mg/L phosphorus limit in permits of major dischargers located in the "highest loading watersheds." Clarification is requested of which watersheds are included in the term "highest loading watersheds." Regardless of which watersheds are intended to be included, setting an arbitrary

limit of 1 mg/L should be deferred in favor of pursuing the most cost-effective and feasible implementation of nutrient loss reductions on a watershed basis.

8. Chapter 8 of the strategy outlines a proposed process and timeline for proposing numeric nutrient criteria to the Pollution Control Board. The difficulties and uncertainties that have prevented scientifically defensible numeric criteria to date are well described in Chapter 3 and on Page 8.2. It is unlikely that these difficulties and uncertainties will be resolved on the timeline shown in Table 8.2. Once again, an adaptive management approach is appropriate and is suggested to evaluate the impact of nutrient loss reductions proposed and underway, before proceeding with numeric criteria. Rather than expending resources on criteria development, refining the information base of nutrient loads, impacts, and reduction costs would be a more beneficial activity during the next several years.

9. We are encouraged that the strategy describes a watershed-based approach to nutrient loss reduction in Chapters 4, 5, 6 as well as other sections. We recommend that the strategy also include an allowance for possible innovative funding mechanisms, such as the environmental utility concept discussed over the past year, that have the potential to facilitate progress toward the goals of the strategy. We recommend that substantial flexibility be provided in the timeframes and requirements for additional reductions from specific sources to allow time for the most cost-effective loss reduction mechanisms to be developed and piloted.

Thank you for considering SDD's comments on the draft strategy.

Sincerely,

Timothy R. Kluge
Technical Director

cc: Mr. Simon Daniels (via email)
SDD File

Sanitary District of Decatur
501 DIPPER LANE • DECATUR, ILLINOIS 62522 • 217/422-6931 • FAX: 217/423-8171

NLRS
PC-852

January 23, 2015

NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East, P.O. Box 19276
Springfield, Illinois 62794-9276

Dear Sir or Madam,

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Thank you for considering SDD's comments on the draft strategy.

Sincerely,

Timothy R. Kluge
Technical Director

cc: Mr. Simon Daniels (via email)
SDD File

Sanitary District of Decatur
501 DIPPER LANE
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NLRS Comments
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East, P.O. Box 19276
Springfield, Illinois 62794-9276

62794$9276 B050

Daniels, Simon

From: David and Barb Serven[redacted]
Sent: Friday, January 23, 2015 9:06 PM
To: Daniels, Simon
Subject: Comments on the IL Nutrient Loss Reduction Strategy
Attachments: NLRS comments.docx

NLRS
PC-8503

To whom it may concern here are my comments regarding the IL Nutrient Loss Reduction Strategy.
Sincerely
David L. Serven
[redacted]

January 28, 2015

NLRS Comments
IL Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East, Box 19276
Springfield, IL 62794-9276

To Whom It May Concern

My name is David Serven, and I am a farmer [redacted] I am writing to submit comments to support the Illinois Nutrient Loss Reduction Strategy. The strategy builds upon existing programs to optimize nutrient loss reduction, while promoting increased collaboration, research and innovation to achieve an ultimately load reduction of 45% called for by the national Gulf Hypoxia Action Plan 2008.

[redacted] We raise corn, soybeans, and hay on 1400 acres of cropland. We milked dairy cattle until September of 2009. We have over 100 acres of pasture ground and have run dairy replacement heifers and beef cattle since. In our area of the state, we have a mixture of flat ground, rolling hills and wooded land. Our typical farm fields are tiled, have grass waterways and, in some cases, have terraces and dry dams to help with the run off of rain during storms. Our land drains into several small creeks that lead to the Spoon River. The Spoon River goes into the Illinois River, which eventually dumps into the Mississippi River.

We currently take several measures to help the environment and protect our waterways. We soil test our fields to find out what levels of nutrients we have. Depending on what these soil tests tell us, we then use variable rate technology to spread nutrients for our crops. We only apply what is needed. We no-till our entire soybean crop. In this way, we plant directly into the standing corn stalks from the previous year's crop. We prevent soil erosion of the land this way. In recent years, we have split our nitrogen application for the corn crop. We still apply anhydrous in the fall, but at lower amounts to decrease any run off. We then apply 28% liquid nitrogen after planting in the spring. The corn better utilizes the nitrogen in this way. We use auto steer on our tractors, which helps us be more efficient with our time and stop any overlapping when spraying chemicals or spreading fertilizer.

My family takes care of our farmland because we want it to be around for the next generation. I have tried to point out the ways my family is working towards reducing our nutrient runoff. In addition to steps farmers take on their own accord, opportunities are available in the form of State programs thru the IL EPA, IL Department of Natural Resources and their local Soil and Water Conservation districts. There are Federal programs as well thru the National Resource Conservation Service such as the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP) and several easement programs. Continued voluntary implementation of best management practices (BMPs) is expected to build on efforts already underway by farmers in Illinois.

The development of the IL Nutrient Loss Reduction Strategy presents an opportunity for everyone to be a part of the solution for reducing nutrient losses into Illinois"s waterways. For Agriculture this is an opportunity to reinvigorate the adoption of voluntary conservation practices and nutrient management practices on the land. There is no "one size fits all" approach for Illinois agriculture, but this is our opportunity to demonstrate that voluntary conservation does work.

Sincerely

David Lee Serven

[redacted]

Daniels, Simon

From: Tim Main [redacted]
Sent: Saturday, January 24, 2015 7:35 AM
To: Daniels, Simon
Subject: Illinois Nutrient Loss Reduction Strategy

NLRS
PC-854

Good Morning,

Thank you for the opportunity to comment on the Nutrient Loss Reduction plan and its potential impact to Agriculture and my farm. First of all let me say those of us in agriculture are as concerned as anyone about water quality in Illinois. We live in it, we drink it, we farm in it.

While our farm has many proud traditions developed over generations of farming, We are constantly looking for ways to improve what we do to better utilize nutrient applications in our cropping and livestock operations. My generation in farming has seen many advancements that have reduced the environmental impact of agriculture.. No-till/reduced tillage, GPS technology, soil nitrate testing, establishing waterways and buffer strips, variable rate technology, just to name a few. Most recently we have reduced the amount of fertilizer applied in the fall and now apply it in the growing season when the crop can better utilize it, and its less prone to moving.

The Illinois Nutrient Loss Reduction Strategy is designed to improve Illinois water quality and the water leaving the state. I support the use of voluntary, incentive-based programs that help us to continue to implement practices that improve water quality on my farm and water leaving Illinois.

Tim Main
[redacted]

--
Tim Main
[redacted]

Daniels, Simon

From: Steve Baker <sbaker@spipipe.com>
Sent: Saturday, January 24, 2015 10:23 AM
To: Daniels, Simon
Subject: Comments to IL NLRS
Attachments: SPI Comments to IL NLRS.pdf

NLRS
PC-
855

Mr. Daniels

Attached are the Springfield Plastics, Inc comments to the NLRS. Please contact us if there are any questions.

Thanks

Steve Baker
President
Springfield Plastics, Inc
217-438-6167

Springfield Plastics, inc.

7300 W State Route 104, Auburn, Illinois 62615
Telephone 217-438-6167
Toll Free 800-252-3361
Fax # 217-438-6949

January 24, 2015

Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Ave. East
Springfield, IL 62794-9276
Attn: Mr. Simon Daniels

Re: Illinois Nutrient Loss Reduction Strategy

Dear Mr.Daniels:

Attached are the Springfield Plastics, Inc. comments to the Illinois Nutrient Loss Reduction Strategy. We are uncertain of the procedure from here on. Will receipt of this be acknowledged and after comments are considered will there be responses?

We are willing to further address our comments and answer any questions the working group may have. Feel free to contact us.

Sincerely,

Stephen W. Baker
President

Page 3.32 Edge of Field Practices

Strategy states:

"One edge-of-field practice we did not include in our cost estimates is drainage water management (DWM). This practice involves raising the outlet of the tile system with a control structure to as little as 6 in below the soil surface during periods when the field does not need to be worked, such as winter and early spring (Frankenberger et al., 2006; Skaggs et al., 2012).This practice works best on flat fields (less than 0.5 percent slope) with new patterned tile systems but can be retrofitted on existing systems. Research has shown that reductions in nitrate-nitrogen loss can be as much as 82 percent and are nearly the same as the water reduction that occurs as a result of raising the tile outlet (Skaggs et al., 2012). In Illinois, Cooke and Verma (2012) found that DWM reduced nitrate-nitrogen by 37-79 percent, which is similar to reductions measured by Woli et al. (2010). However, most of these studies have been on small fields, often just a few acres, and there is little understanding of what happens to the water and nitrates held back. Nearly all studies have shown that most of the water does not drain out when the tile outlet is lowered. If the water and nitrate-nitrogen move through lateral seepage due to the tile being raised to a nearby ditch or tile system, then the effectiveness at the watershed scale would be greatly reduced. A recent study by Sunohara et al. (2014) showed that DWM could increase seepage both laterally and into groundwater, which could limit its effectiveness. However the authors also indicated more research was needed because their study was only during the growing season rather than during winter and early spring, when we really expect this practice to be utilized. Given these uncertainties, we did not include it in any scenario."

Springfield Plastics Comments

We would respectively disagree with the exclusion of drainage water management (DWM) as an edge of field practice to be utilized in the reduction of nitrogen losses. Outlined below are our comments on this practice.

1) We concur with your initial statements about the amount of N reductions that have been reported. This practice has been researched for many years across broad geographies and climates with reductions consistently in the ranges you report.

2) We do disagree with the statement that this practice has been studied on mostly small fields.DWM was researched extensively through a Conservation Innovation Grant (CIG) administered by The Agricultural Drainage Management Coalition (ADMC). This research was done over four states in the Midwest for a three year period. Listed below are the sites and their respective sizes, with half of each area being under DWM, and the other half used for comparison.

Illinois Hume N – 75 acres
Illinois Hume S - 32 acres
Illinois Barry - 23 acres
Illinois Enfield – 80 acres
Iowa Hamilton County – 40 acres
Indiana Francesville – 78 acres
Indiana Reynolds – 38 acres
Indiana Crawfordsville – 60 acres

Minnesota Hayfield – 55 acres
Minnesota Wilmont – 32 acres
Minnesota Windom – 146 acres

3) The Strategy states "There is little understanding of what happens to the water and nitrates held back. Nearly all studies have shown that most of the water does not drain out when the tile outlet is lowered. If the water and nitrate-nitrogen move through lateral seepage due to the tile being raised to a nearby ditch or tile system, then the effectiveness at the watershed scale would be greatly reduced." Our comments on this are as follows.

We do agree with what is being said here, but our experience and understanding of drainage, question the "if" being raised. The overall understanding of the water equation/balance in DWM systems is still not fully understood as stated. Based upon our observations and understanding of how water is being held back in a DWM system, we do not believe that lateral movement of the pooled water occurs in any significant amount in larger fields, where edge effects are not as substantial as in small fields. This is one reason why the NRCS recommends that the practice be restricted to fields where the influenced area exceeds 15 acres. The soils being drained are being drained because they have low permeability. This soil permeability will not allow the water to move laterally. Deep seepage to groundwater to our knowledge has not been researched. If this practice is included in the strategy, deep seepage would be a further research project that would be recommended. Evidence seems to suggest that whatever pathway water leaves the field, the nitrate concentration will be less than if it left through the drainage tile.

Are we certain that we are holding "nitrates" back or some other form of N? The Illinois Agronomy Handbook states in Chapter 9 Page 118 that nitrification is accelerated as soil temperatures rise and when there is good soil aeration. This condition is the opposite of what happens when DWM is implemented in the fall. Our soil temperatures stay cool and the aeration is lost due to the saturated condition. We do not know the answer to this and realize the strategy may not be the proper venue for this question.

4) NRCS has spent considerable effort in the implementation of DWM. The practice has been approved for cost share under practice standard 554. Currently, producers can receive cost share on the control structures, the DWM conservation plan and a management fee to operate the control structures each year. It appears there would be a disconnect if the strategy does not include DWM.

5) DWM has been included in the Iowa Nutrient Reduction Loss Strategy. The practice will be much more applicable in Illinois than Iowa due to difference in flat topography. The practice also grades out very well in the Iowa strategy at a cost of $1.29/lb of N removed.

6) DWM has a high initial investment cost considering the entire drainage system. The practical approach to this would be that the producer will pick up a substantial amount of this cost in the initial drainage system and the incentive needs to be enacted to encourage implementation of the practice and pay for modifications and or adjustments needed.

7) The map (figure 3.13, page 3.16) areas with the highest non-point nitrate-nitrogen yields are also the areas that would have the lowest cost and the most available acres for drainage water management.

8) DWM is a conservation practice that takes no farmland out of production. The management is simple. Given the proper emphasis this will make the practice far easier to implement than practices that take land out of production.

9) As stated in the conclusion (page 3.51) "estimates of potential nutrient reductions in this report are rough estimates based upon existing research". We fully agree with this caveat. There is no indication that the uncertainties associated with DWM is any different from the uncertainties associated with any of the other practices being considered. Given this, we believe Drainage Water Management should be included in the Strategy and it would be an opportunity lost if excluded.

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patrick Maloney <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:15 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-856

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patrick Maloney
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Leonardi <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:15 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-8 57

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

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Sincerely,

John Leonardi

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lisa Stone <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:18 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-858

Jan 24, 2015

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IL

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Sincerely,

Lisa Stone

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lisa Keim <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-859

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

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Sincerely,

Lisa Keim

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anna McCreery <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-860

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anna McCreery
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Patricia Knol <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:22 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-861

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Patricia Knol
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mark Hinds <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-862

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

Without exception, my local rivers and streams look polluted and are not safe to swim or boat in, let alone drink from. The Des Plaines River is one example. I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mark Hinds
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Alison Baker <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-063

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Alison Baker
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anah Mcmahon <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:30 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-864

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anah Mcmahon
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Colin Kay <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:31 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-865

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

When our water is gone??

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Colin Kay

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ashly Chacko <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:32 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-868

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ashly Chacko
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anne Logue <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:32 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-867

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anne Logue
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Richard Laubhan <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-868

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Richard Laubhan
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of A Finken <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-867

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

A Finken
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Janet Eggleston <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:34 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-870

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Janet Eggleston
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joseph Nowak <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:35 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-871

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joseph Nowak
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lynnley Wilson <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:36 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-872

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

This is the chance to set concrete targets that will help protect our state's rivers and the aquatic life and recreation they support. Algae overgrowth is out of control and has been overlooked for too long.
Steps must be made to control this before our rivers and aquatic life are in danger of losing this battle. Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lynnley Wilson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Chris Hornbacker <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:36 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-873

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Chris Hornbacker
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Janice Harpest <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:37 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-874

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Janice Harpest

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barry Adler <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:38 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-875

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barry Adler
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barry Petrigala <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:39 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-876

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barry Petrigala
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of K Walla <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:40 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-877

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

K Walla

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Arthur Burzykowski <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:42 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-878

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Arthur Burzykowski
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Ruth Kelley <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:42 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-379

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Ruth Kelley
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robert Chasteen <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:43 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-880

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robert Chasteen

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Arlene Hickory <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:45 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-281

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Clean water is a basic human need. Delay in action could do immense harm

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Arlene Hickory
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Steven Wade <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:46 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC - 882

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Steven Wade
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of David Butler <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:47 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-983

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

David Butler
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Catharine Crockett <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:49 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-884

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Catharine Crockett

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Cortney Zaret <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:49 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-885

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Cortney Zaret
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Leslie Osborne <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:52 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-886

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Leslie Osborne
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of James Salkas <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-887

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

James Salkas
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dan Lara <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:52 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-888

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dan Lara
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of James McCarthy <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:53 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-889

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Having grown up in Montgomery County, Indiana, I know how important farming is. I also worked in a factory in Northbrook, Illinois, that used thousands of gallons of phosphoric acid every month; much of it went into the waste water treatment system for Ph adjustment, but still would have been rich in phosphates went entering the sewer system.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

James McCarthy

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kenneth Jones <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-890

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kenneth Jones
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Samantha Lusby <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-891

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Samantha Lusby

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Wydra <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 4:58 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-892

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Wydra
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Eva-Carol Beck <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-893

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Eva-Carol Beck

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Robin Garlish <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-894

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Robin Garlish
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Carla Burke <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-895

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Carla Burke

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Paul Punkay <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-896

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Paul Punkay
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Allison Fradkin <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:05 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-897

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Allison Fradkin

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kyle Freiler <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:08 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-898

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kyle Freiler

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Denise Recalde <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:09 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-899

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Denise Recalde

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Kelly <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:09 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-900

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Kelly

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Donna Prost <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:10 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-901

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Donna Prost

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Vicki Joseph <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:10 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-902

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Vicki Joseph
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Martina Jonsson <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:12 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-903

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Martina Jonsson

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sharon DeCelle <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:14 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-904

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sharon DeCelle

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of C. Wilcox <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:15 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-905

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

C. Wilcox
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marcy Carr <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:15 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-906

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marcy Carr
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of oooooooo oooooo <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:16 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-907

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

oooooooo oooooo
000 o 00 oo
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jeff Walden <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-908

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jeff Walden
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anthony Byrne <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-909

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anthony Byrne
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joanne Pakieser <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:23 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-910

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joanne Pakieser
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Michael Tregoning <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:24 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-911

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Andrea Gruszecki <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-912

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Andrea Gruszecki
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mary Robbins <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
RC-913

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mary Robbins
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dolores Blahaus <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-914

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dolores Blahaus

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kate Michels <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:26 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-915

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kate Michels
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Stacy Lang <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:29 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-916

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Stacy Lang
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Mike Rigoli <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:30 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-917

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Mike Rigoli

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sandra Moyer <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:31 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-91B

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sandra Moyer

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sarah Love <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-919

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sarah Love

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Michael Rahaman <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-920

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Michael Rahaman

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Marilyn Sieck <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:33 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-921

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Marilyn Sieck

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Jerome Hossli <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:34 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-423

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Jerome Hossli
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of W Johnson <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:37 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-424

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

This needs to be done. We cannot just sit back and wait for a miracle, which may never come.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

W Johnson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Susan Barrons <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:38 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-425

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Susan Barrons
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Janice Metzger <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:40 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-926

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Janice Metzger
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Barbara Zechlin <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:40 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-927

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Barbara Zechlin
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Elizabeth Stange <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:43 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-928

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Elizabeth Stange

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of John Zahos <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:46 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-929

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

John Zahos
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Charlene Crudup <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:48 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-930

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Charlene Crudup

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Alexandra Sipiora <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:49 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-931

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution.. Thank you for your attention on this matter.

Sincerely,

Alexandra Sipiora
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lois Shane <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:49 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-932

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lois Shane

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of William Hermes <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:49 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-933

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

The proof for all this is in Cuba. Check out how coral reefs are THRIVING down there, due to lack of nutrient run-off (since no one subsidizes their use there).

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

William Hermes
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Judith Rosenlund <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:50 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-934

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Judith Rosenlund
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Nadine Bozek <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:51 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-935

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Nadine Bozek
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kim Ziegler <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:52 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-936

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kim Ziegler
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joshua Herman <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:52 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-937

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joshua Herman
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Derek Adkisson <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:54 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-938

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Derek Adkisson

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Martin Jordan <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-939

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Martin Jordan
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Paula Brinkman Lowe <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-940

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Paula Brinkman Lowe
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Nancy Bennett <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-941

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Nancy Bennett
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lee Lovstad <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 5:57 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-843

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Professor Hurst H. Shoemaker, University of Illinois, took my wildlife biology class on field trips to the Illinois River. Doc said that Frank Bellrose was predicting that the river would soon be environmentally dead. Fortunately, this prediction is as yet not true, but given the national concern over runoff effect I may live to see his dire prediction come true, with inexcusable consequence downstream. Such a shame!

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lee Lovstad
[redacted]

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Deanna Bialczak <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:00 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-943

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Deanna Bialczak

[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of R.Peter Carey <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-944

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

R.Peter Carey

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Roger Prosise <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:01 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-945

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Roger Prosise
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Kay Trevarthen <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:02 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-946

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Kay Trevarthen
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Sheryl Smetana <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:04 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-947

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Sheryl Smetana
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Julie Schmidt <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:05 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-~~458~~
948

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Julie Schmidt
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Joy Maddox <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:08 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-949

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Joy Maddox
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Rosalba Mares <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:09 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-950

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Rosalba Mares
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Gerald Thompson <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:10 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-957

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Gerald Thompson
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Amy Kitzmiller <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:10 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-952

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Amy Kitzmiller
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Maria Romani <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:10 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-953

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Maria Romani
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Anne Shilkaitis <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:12 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-954

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Anne Shilkaitis
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Melanie Hoekstra <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:13 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-955

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Melanie Hoekstra
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Charles Shelby <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:13 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-956

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Charles Shelby
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of RR Lewis <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:14 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-957

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

RR Lewis
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Renee Gauri <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:17 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-958

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Renee Gauri
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Phyllis Hess <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:17 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-959

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Sincerely,
P. Hess
[redacted]

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Phyllis Hess
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Lucy Diambri <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:19 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-960

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Lucy Diambri
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of paul wnek <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:20 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-961

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

Despite the numerous known impacts of excessive phosphorus levels in waterways, Illinois still lacks a water quality standard for phosphorus for its rivers and streams. After years of collecting data and conducting studies, it is time to take action. IEPA must move forward and adopt a phosphorus standard to protect our waterways and the ecosystems they support.

IEPA should also conduct studies on watersheds known to contribute large volumes of phosphorus downstream, like the Chicago and Des Plaines Rivers, to determine what levels of phosphorus these waters can tolerate. These studies should focus on the impacts of various levels of phosphorus on algae and dissolved oxygen levels, and in turn on aquatic life.

I urge you to take these steps to protect our Illinois waterways and reduce our contribution to Gulf Hypoxia, the second largest hypoxic zone in the world and the largest hypoxic zone currently affecting the United States.

Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

paul wnek
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of young klessig <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:25 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-962

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

young klessig
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of mark jolliffe <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-963

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

mark jolliffe
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Keri Jensen <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:55 PM
To: Daniels, Simon
Subject: NLRS Comments

NLRS
PC-964

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and.ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Keri Jensen
[redacted]

Daniels, Simon

From: Sierra Club <katrina.phillips@sierraclub.org> on behalf of Dan Girzadas III <sierra@sierraclub.org>
Sent: Saturday, January 24, 2015 6:56 PM
To: Daniels, Simon
Subject: NLRS Comments

NCRS
PC-965

Jan 24, 2015

Mr. Simon Daniels IEPA
IL

Dear Mr. Daniels IEPA,

I appreciate the work of many that has gone into the draft Illinois Nutrient Loss Reduction Strategy, but we need a stronger plan with defined steps to meet a goal of 46% reduction in nitrogen and 50% reduction in phosphorus by 2040. The plan must have interim benchmarks that allow us to measure its success and ensure that we are on track to achieve the needed reductions.

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Please make sure the final strategy is strong enough to effectively protect our waters from nutrient pollution. Thank you for your attention on this matter.

Sincerely,

Dan Girzadas III
[redacted]

Daniels, Simon

From: cindy logsdon [redacted]
Sent: Saturday, January 24, 2015 7:50 PM
To: Daniels, Simon
Subject: comment on nutrient reduction policy

NLRS
PC-966

Mr Simon,

I didn't find out about the public review of this policy in time to review the whole document however there are a couple of points I would like to make. I don't want the farmers to take the brunt of all of this as they are only one of the many players in this problem. Farmers listen to the recommendations of their fertilizer reps. This may be an unfounded trust as the fertilizer companies are in the business of selling fertilizers whether they are needed or not. That needs to be addressed. The same is true for lawn care companies for homeowners. Timing of applications need to take into account 24 hour weather to minimize run off. This can't always be predicted as weather isn't an exact science. Industry also needs to abide by the same rules as everyone else. We are all in this together, we all share in the blame, and we all need to be part in the solution. [redacted] I have seen evidence of all of these excesses first hand in all levels: farms, homes, and industry. Please consider my thoughts in your policy.

Thanks

Cindy Logsdon

Daniels, Simon

NLRS
PC-967

From: Cindy Skrukrud <cindy.skrukrud@sierraclub.org>
Sent: Saturday, January 24, 2015 8:55 PM
To: Daniels, Simon
Cc: Katrina Phillips; Albert Ettinger; Kim Knowles; Stacy James; Bradley Klein; Jessica Dexter
Subject: NLRS Comments
Attachments: Env Orgs Comments on Illinois Nutrient Loss Reduction Strategy1.24.15.pdf

Simon,

Attached please find comments on the Public Comment Draft of the Illinois Nutrient Loss Reduction Strategy from Prairie Rivers Network, ELPC and the Illinois Chapter of the Sierra Club.

Let me know if you have any problems reading the attachment.

Thanks!

Cindy

--
Cindy Skrukrud PhD
Clean Water Advocate
Illinois Chapter, Sierra Club

312-251-1680 x110
cindy.skrukrud@sierraclub.org

Water is the most critical resource issue of our lifetime and our children's lifetime. The health of our waters is the principal measure of how we live on the land.
Luna Leopold, Hydrologist

January 24, 2015

Sent via email to Simon.Daniels@illinois.gov

Simon Daniels
Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Ave. East
Springfield, IL 62794-9276

Re: Comments of Sierra Club, Prairie Rivers Network, and the Environmental Law & Policy Center re: Illinois Nutrient Loss Reduction Strategy Draft for Public Comment

Dear Mr. Daniels:

Representatives of the Environmental Law & Policy Center, Prairie Rivers Network and the Illinois Chapter of the Sierra Club have reviewed the Illinois Nutrient Loss Reduction Strategy Draft for Public Comment (the "Draft"). We acknowledge that some progress has been made in addressing nutrient pollution from point sources in Illinois and that the Draft Strategy promises more such progress.

Unfortunately, the Draft Strategy does not clearly lay out the necessary course of action with benchmarks along the way to achieve the needed reductions. The Illinois Nutrient Loss Reduction Strategy (the "Strategy") should set the course to resolve Illinois' nutrient problems- both for in-state waters and our state's contribution to Gulf Hypoxia. While the Draft Strategy is a step in the right direction, we are disappointed that the Draft does not contain concrete targets and ways to measure progress.

Further, there is no excuse for failing to move forward to establish numeric criteria for total phosphorus for Illinois rivers and streams immediately. There is sufficient scientific evidence to support such criteria. In addition, under the law, IEPA must in the interim write numeric effluent limits in Illinois NPDES permits to prevent discharges that have a reasonable potential to cause or contribute to violations of Illinois' dissolved oxygen standards or the Illinois narrative standards against plant or algal growth of other than natural origin.

Comments Regarding Specific Chapters
In the following comments, suggestions of additional language are underlined; language we think should be deleted contains strike-outs, and general comments appear in italics.

<u>Executive Summary</u>

Comments on Specific Text
- Page e under "Key Strategy Components":
    - Extends ongoing regulatory and voluntary efforts. The Strategy describes a comprehensive suite of best management practices for reducing loads from wastewater treatment plants and urban and

agriculture runoff. These practices will help the state reduce its phosphorus load by 25 percent and its nitrate-nitrogen load by 15 percent by 2025. The eventual target is a 45 percent reduction in the loss of these nutrients to the Mississippi River from a 1980-1996 baseline.

- Establishes a 2040 target end date to meet the 45% nitrate-nitrogen and phosphorus load reduction goals.
- Lays out a scenario of wastewater treatment improvements and agricultural management practice changes necessary to meet the 2025 milestone and 2040 target.
- Adopts a target schedule to implement needed improvements of 20% by 2020, 40% by 2025, 60% by 2030, 80% by 2035 and 100% by 2040.
- Creates the Nutrient Science Advisory Committee to develop numeric nutrient criteria for Illinois waters. This committee will evaluate all available research, data, and methodologies and recommend a credible approach. It will use both Illinois data and data from similar watersheds in other states to swiftly move forward on recommending statewide phosphorus standards for rivers and streams to supplement the existing phosphorus criteria for lakes. It will also conduct additional scientific review to help develop appropriate criteria for nitrogen.

Chapter 1: Introduction

Comments on Specific Text

- Page 1.6 under "Total Maximum Daily Load":

Load Allocations are in effect non-point source management goals that do not currently impose a regulatory requirement on non-point source discharges. Consequently, TMDL watersheds impaired by non-point sources of pollution are not being cleaned up and the expectations under Reasonable Assurance are not being met. To reach the pollution reduction goals of a TMDL, IEPA will establish a mechanism to require non-point sources of pollution to contribute their fair share of reductions. If pollution is not minimized to the level of the Waste Load Allocation and Load Allocation together, water quality will not improve. Illinois EPA has developed over 600 TMDLs that have been approved by U.S. EPA and are in various stages of implementation. The TMDLs developed to date have focused on pollutants for which there are a numeric water quality standard. To improve the program, IEPA will establish numeric targets for nutrients for the purpose of TMDL development.

Chapter 2: Goals and Milestones

General Comments

The Strategy states that point sources, agricultural non-point sources, and urban non-point sources are expected to meet loss reduction goals in proportion to their contribution. The Strategy would be clearer if each sector was assigned a numeric loss reduction goal in Chapter 2. Further, we believe that sewage treatment plants should take out more than a proportional amount of phosphorus because sewage treatment plants discharge phosphorus in a form (SRP) that is much more bioavailable to aquatic plants, algae and cyano-bacteria and, thus, more dangerous to the environment.[1] *A goal should be set of getting*

[1] Millier Helen K.G.R., Hooda, Peter S., *Phosphorus species and fractionation - Why sewage derived phosphorus is a problem*, J. Env. Mgt. 92 (2011) 1210-1214; Jarvie, Helen P., Neal, Colin, Withers, Paul J.A., *Sewage-effluent phosphorus: A greater risk to river eutrophication than agricultural phosphorus?*, Science of the Total Environment 360 (2006) 246-253.