STAGE 1 DRAFT FOR PUBLIC REVIEW

Saline Branch Watershed HUC 0512010902 TMDL Stage 1 Report

Prepared for Illinois EPA

June 2021

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Acronyms

BMPs	best management practices
CDL	Cropland Data Layer
CPESC	Certified Professional in Erosion and Sediment Control
CPP	Conservation Practices Program
CREP	Conservation Reserve Enhancement Program
CWA	Clean Water Act
CWLP	City Water, Light and Power
FRSS	facility related stream survey
GIS	geographic information system
HUC	Hydrologic Unit Code
IDA	Illinois Department of Agriculture
IDNR	Illinois Department of Natural Resources
IGIG	Illinois Green Infrastructure Grant
Illinois EPA	Illinois Environmental Protection Agency
IPCB	Illinois Pollution Control Board
ISWS	Illinois State Water Survey
LA	Load Allocation
LC	Loading Capacity
LRS	load reduction strategy
LSW	Lake Springfield Watershed
LSWMRP	Lake Springfield Watershed Maintenance and Restoration Program
LSWRPC	Lake Springfield Watershed Resources Planning Committee
µg/L	micrograms per liter
mg/L	milligrams per liter
MS4	municipal separate storm sewer
MOS	Margin of Safety
NA	not applicable
NASS	National Agricultural Statistics Service
NCDC	National Climatic Data Center
NCEI	National Centers for Environmental Information
NED	National Elevation Dataset
NLCD	National Land Cover Dataset
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
PAC	powdered activated carbon
RC	Reserve Capacity
RUSLE	Revised Universal Soil Loss Equation
SAFE	State Acres for Wildlife Enhancement
SCSWCD	Sangamon County Soil and Water Conservation District
SMSD	Springfield Metro Sanitary District
SSURGO	Soil Survey Geographic
STORET	USEPA's Storage and Retrieval
STP	sanitary treatment plant
TMDL	total maximum daily load
TSS	total suspended solids
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	U.S. Geological Survey
WLA	Waste Load Allocation

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Section 1

Goals and Objectives for the Saline Branch Watershed

1.1 Total Maximum Daily Load Overview

A total maximum daily load, or TMDL, is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards. TMDLs are a requirement of Section 303(d) of the Clean Water Act (CWA). To meet this requirement, the Illinois Environmental Protection Agency (Illinois EPA) must identify water bodies not meeting water quality standards and then establish TMDLs for restoration of water quality. Illinois EPA develops a list known as the 303(d) list of water bodies not meeting water quality standards every two years, and it is included in the Integrated Water Quality Report. Water bodies on the 303(d) list are then targeted for TMDL development. Water bodies listed as impaired in this TMDL report are from the most recent final 2018 Integrated Water Quality Report and 303(d) list that was approved by USEPA on March 19, 2021[1]. In accordance with USEPA's guidance, the report assigns all waters of the state to one of five categories. 303(d) listed water bodies make up category five in the integrated report (Appendix A of the final 2018 Integrated Water Quality Report).

In general, a TMDL is a quantitative assessment of water quality impairments, contributing potential sources, and pollutant reductions needed to attain water quality standards. The TMDL specifies the amount of pollutant or other stressor that needs to be reduced to meet water quality standards, allocates pollutant control or management responsibilities among sources in a watershed, and provides a scientific and policy basis for taking actions needed to restore a water body.

Water quality standards are laws or regulations that states authorize to enhance water quality and protect public health and welfare. Water quality standards provide the foundation for accomplishing two of the principal goals of the CWA. These goals are:

- Restore and maintain the chemical, physical, and biological integrity of the nation's waters; and
- Where attainable, achieve water quality that promotes protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water.

Water quality standards consist of three elements:

- The designated beneficial use or uses of a water body or segment of a water body;
- The water quality criteria necessary to protect the use or uses of that water body; and
- An antidegradation policy.

[1] https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx

Examples of designated uses are primary contact (swimming), protection of aquatic life, and public and food processing water supply. Water quality criteria describe the quality of water that will support a designated use. Water quality criteria can be expressed as numeric limits or as a narrative statement. Antidegradation policies are adopted so that water quality improvements are conserved, maintained, and protected.

1.2 TMDL Goals and Objectives for the Saline Branch Watershed

The Illinois EPA has a three-stage approach to TMDL development. The stages are:

Stage 1 – Watershed Characterization, Data Analysis, Methodology Selection

Stage 2 – Data Collection (optional)

Stage 3 – Model Calibration, TMDL Scenarios, Implementation Plan

Illinois EPA uses the US Geologic Survey (USGS) 10-digit hydrologic unit code (HUC) to group subbasins into TMDL watersheds. This report addresses Stage 1 TMDL development for the Saline Branch watershed (HUC 0512010902). Stages 2 and 3 will be conducted upon completion of Stage 1. Stage 2 is optional as data collection may not be necessary if additional data are not required to establish the TMDL.

Following this process, the TMDL goals and objectives for the Saline Branch Watershed will include developing TMDLs for all impaired water bodies within the watershed, describing all of the necessary elements of the TMDL, developing a watershed-based plan (WBP) for implementing each TMDL, and gaining public acceptance of the process.

Following are the impaired water body segments in the Saline Branch watershed:

- Saline Branch Drainage Ditch (BPJC-08)
- Boneyard Creek (BPJCA)

These impaired water body segments are shown on **Figure 1-1**. **Table 1-1** lists the water body segment, water body size, and potential causes and sources of impairment for each impaired segment.

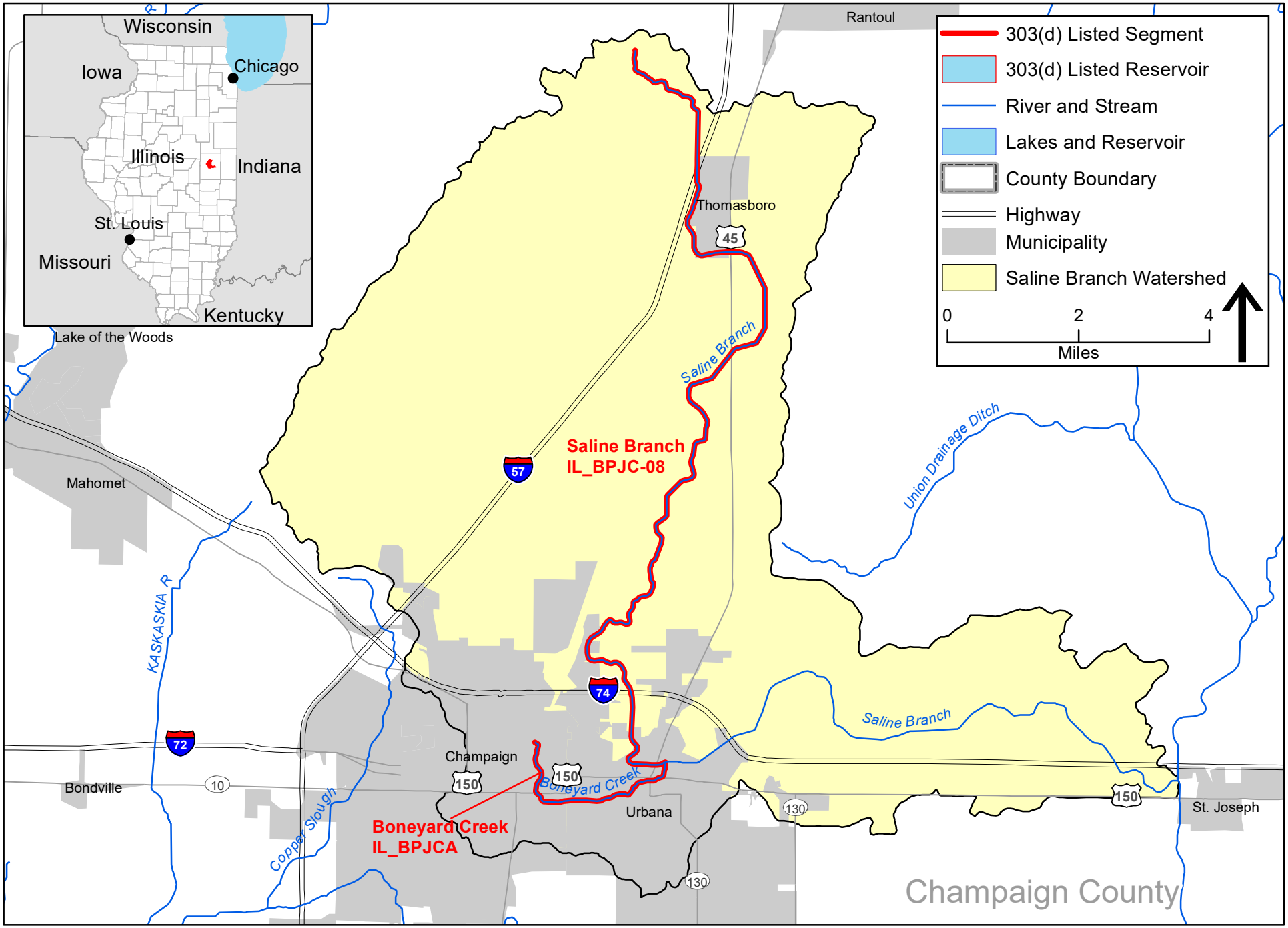

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Figure 1-1: Saline Branch Watershed, HUC 0512010902

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Table 1-1 Impaired Water Bodies in the Saline Branch Watershed

Segment ID	Segment Name	Water Body Size	Potential Causes of Impairment	Designated Use	Potential Sources (as identified by the 2018 303(d) list)
BPJC-08	Saline Branch Drainage Ditch	14.11 miles	**pH**	Aquatic Life	Source Unknown
BPJCA	Boneyard Creek	3.28 miles	**Dissolved Oxygen**	Aquatic Life	Urban Runoff/Storm Sewers
			Copper	Aquatic Life	Urban Runoff/Storm Sewers
			Phosphorous (Total)	Aquatic Life	Urban Runoff/Storm Sewers

Bold Causes of Impairment have numeric water quality standards and TMDLs will be developed. *Reduction goals established by Illinois EPA will be applied to Italicized Causes of Impairment.*

Illinois EPA is currently only developing TMDLs for parameters that have numeric water quality standards. For potential causes that do not have numeric water quality standards, as noted in Table 1-1, TMDLs will be deferred until those criteria are developed. However, until numeric criteria are adopted, WBPs will be developed using percent reduction goals that have been established by Illinois EPA. In addition, some of these potential causes may be addressed by implementation of controls for the pollutants with numeric water quality standards.

The TMDL for the segments listed above will specify the following elements:

- Loading Capacity (LC) or the maximum amount of pollutant loading a water body can receive without violating water quality standards
- Waste Load Allocation (WLA) or the portion of the TMDL allocated to existing or future point sources
- Load Allocation (LA) or the portion of the TMDL allocated to existing or future nonpoint sources and natural background
- Margin of Safety (MOS) or an accounting of uncertainty about the relationship between pollutant loads and receiving water quality
- Reserve Capacity (RC) or a portion of the load explicitly set aside to account for growth in the watershed

These elements are combined into the following equation:

$$\mathbf{TMDL = LC = \Sigma WLA + \Sigma LA + MOS + RC}$$

TMDLs will take into account the seasonal variability of pollutant loads so that applicable water quality standards are met during all seasons of the year. Also, reasonable assurance that the TMDLs will be achieved will be described in the WBP. The WBP for the Saline Branch watershed will describe how water quality standards and goals will be met and attained. This plan will include recommendations for implementing best management practices (BMPs), cost estimates, institutional needs to implement BMPs and controls throughout the watershed, and a timeframe for completion of implementation activities.

1.3 Report Overview

The remaining sections of this report contain:

- **Section 2 Saline Branch Watershed Characteristics** provides a description of the watershed's location, topography, geology, land use, soils, population, and hydrology.
- **Section 3 Public Participation and Involvement** discusses public participation activities that will occur throughout TMDL development.
- **Section 4 Saline Branch Watershed Water Quality Standards** defines the water quality standards for the impaired water bodies.
- **Section 5 Saline Branch Watershed Data and Potential Sources** presents the available water quality data needed to develop TMDLs, discusses the characteristics of the impaired stream segments in the watershed, and also describes the point and nonpoint sources with potential to contribute to the watershed load.
- **Section 6 Approach to Developing TMDL and Identification of Data Needs** makes recommendations for the models and analysis that are needed for TMDL development and also suggests segments for Stage 2 data collection.
- **Section 7 Refrences**

Section 2

Saline Branch Watershed Description

2.1 Saline Branch Watershed Location

The Saline Branch Watershed (HUC 0512010902 shown on Figure 1-1) is located in east central Illinois, flows to the east, drains approximately 57,100 acres[1], and lies within Champaign County.

2.2 Topography

Topography is an important factor in watershed management because stream types, precipitation, and soil types can vary dramatically by elevation. National Elevation Dataset[2] (NED) coverages containing 30-meter grid resolution elevation data are available from the USGS for each 1:24,000-topographic quadrangle in the United States. Elevation data for the Saline Branch Watershed were obtained by overlaying the NED grid onto the geographic information system (GIS)-delineated watershed. **Figure 2-1** shows the elevations found within the watershed.

Elevation in the Saline Branch watershed ranges from approximately 850 feet above sea level in the western portion of the watershed to approximately 650 feet at the confluence of the Saline Branch and the Salt Fork of the Vermilion River downstream at the southeastern extent of the watershed.

2.3 Land Use

Land use data for the Saline Branch watershed were extracted from the U.S. Department of Agriculture's (USDA) National Agriculture Statistics Service (NASS) 2018 Cropland Data Layer[3] (CDL), The CDL is a raster based, geo-referenced, crop-specific land cover data layer created to provide acreage estimates to the Agricultural Statistics Board for the state's major commodities and to produce digital, crop-specific, categorized geo-referenced output products. This information is made available to all agencies and to the public free of charge and represents the most accurate and up-to-date land cover datasets available at a national scale. The most recent available CDL dataset was produced in 2018 and includes 20 separate land use classes applicable to the watershed. The available resolution of the land cover dataset is 30 square meters. The 2018 CDL and extensive metadata are available at https://www.nass.usda.gov/Research_and_Science/Cropland/Release/index.php.

Land use characteristics of the watershed were determined by overlaying the Illinois 2018 CDL data layer onto the GIS-delineated watershed. **Table 2-1** contains the land uses contributing to the Saline Branch watershed, based on the 2018 CDL land cover categories and also includes the area of each land cover category and percentage of the watershed area. **Figure 2-2** illustrates the land uses of the watershed. **Appendix A** contains land use/land cover data.

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[1] *Watershed areas calculated with ArcGIS software and based on USGS 10-meter digital elevation model data.*
[2] https://catalog.data.gov/dataset/usgs-national-elevation-dataset-ned
[3] https://www.nass.usda.gov/Research_and_Science/Cropland/Release/index.php

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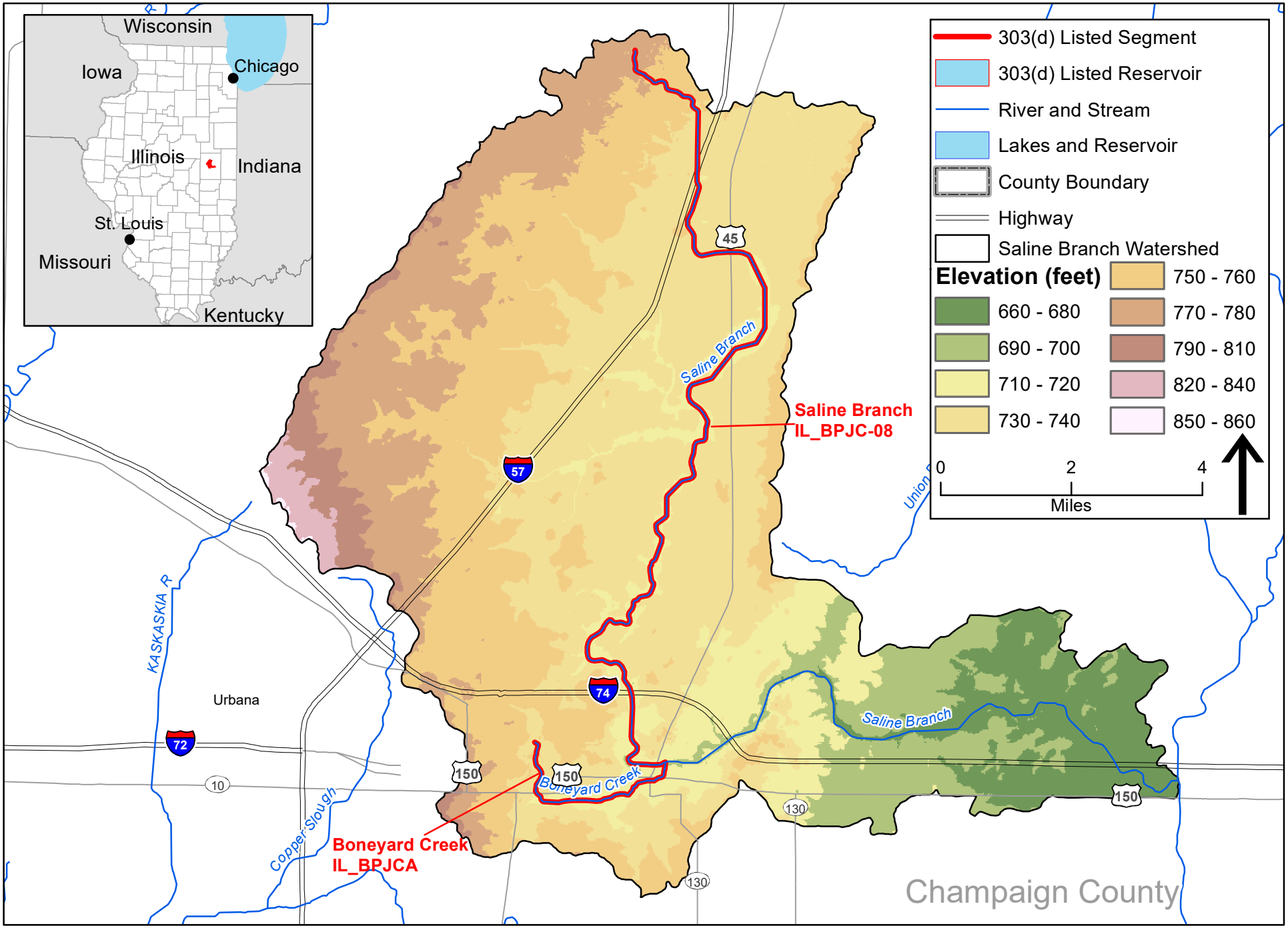

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Figure 2-1: Saline Branch Watershed, Elevation

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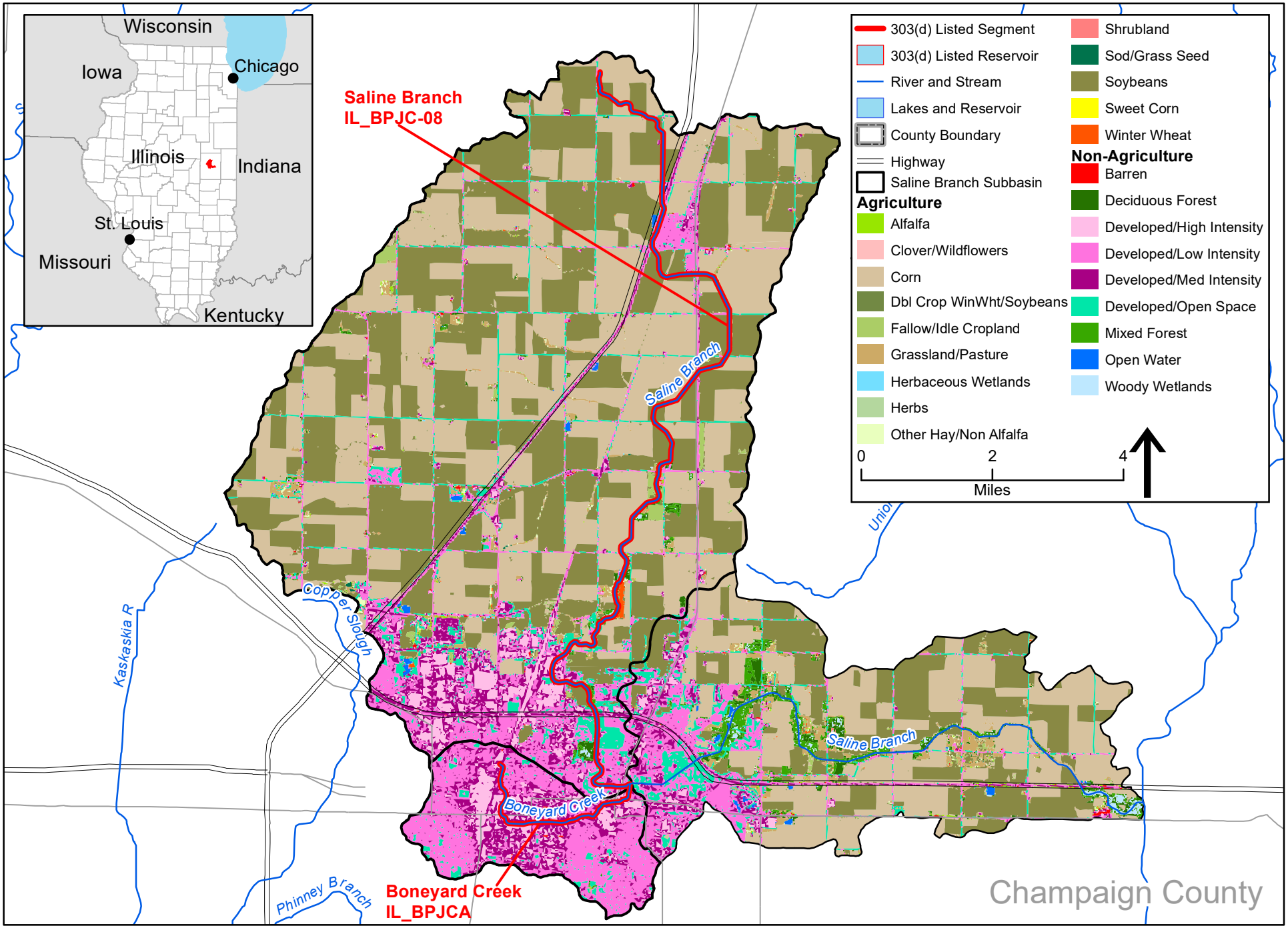

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Figure 2-2: Saline Branch Watershed, Land Use

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Table 2-1 Land Cover and Land Use in Saline Branch Watershed as provided by the USDA NASS 2018 CDL

Land Cover Category	Area (Acres)	Percentage
Corn	21,579	37.8%
Soybeans	18,676	32.7%
Developed/Low Intensity	7,155	12.5%
Developed/Med Intensity	3,070	5.4%
Developed/Open Space	2,707	4.7%
Developed/High Intensity	1,362	2.4%
Grass/Pasture	1,219	2.1%
Deciduous Forest	979	1.7%
All Others	340	0.6%
Total	**57,087**	**100%**

The land cover data reveal that approximately 40,255 acres, representing over 71 percent of the total watershed area, are devoted to agricultural. Approximately 25 percent of the watershed area (14,294 acres) is developed land. Grasslands and pasture account for 2.1 percent of the watershed while forest, grassland, and upland areas represent a total of 1.7 percent of the watershed. Wetlands, marshes, and open water make up the remaining 0.6 percent of the watershed.

2.3.1 Subbasin Land Use

The subbasin area draining to each impaired segment was further delineated through GIS (see **Figure 2-2**). Land cover data were then intersected with the subbasin boundary to determine the land uses contributing runoff to the waterbodies (**Tables 2-2 and 2-3**). The Saline Branch subbasin is mostly agricultural with developed land in the southern portion while the Boneyard Creek subbasin is mostly urbanized.

Table 2-2 Land Cover and Land Use in the Boneyard Creek Segment BPJCA Subbasin.

Land Cover Category	Area (Acres)	Percentage
Developed/Low Intensity	2,203	56%
Developed/Med Intensity	1,076	28%
Developed/High Intensity	474	12%
Developed/Open Space	149	3.8%
Corn	0.1	<0.1%
Total	**3,902**	**100%**

Table 2-3 Land Cover and Land Use in the Saline Branch Drainage Ditch Segment BPJC-08 Subbasin

Land Cover Category	Area (Acres)	Percentage
Corn	16,885	43%
Soybeans	14,160	36%
Developed/Low Intensity	3,199	8.2%
Developed/Open Space	1,618	4.1%
Developed/Med Intensity	1,441	3.7%
Developed/High Intensity	773	2.0%
Grass/Pasture	599	1.5%
Deciduous Forest	208	0.5%
All Others	182	0.5%
Total	**39,065**	**100%**

2.4 Soils

Soils data are available through the Soil Survey Geographic (SSURGO) database[4]. For SSURGO data, field mapping methods using national standards are used to construct the soil maps. Mapping scales generally range from 1:12,000 to 1:63,360 making SSURGO the most detailed level of soil mapping done by the National Resources Conservation Service (NRCS).

Attributes of the spatial coverage can be linked to the SSURGO databases, which provide information on various chemical and physical soil characteristics for each map unit and soil series. Of particular interest for TMDL development are the hydrologic soil groups as well as the K-factor of the Universal Soil Loss Equation. The following sections describe and summarize the specified soil characteristics for the Saline Branch watershed.

2.4.1 Saline Branch Watershed Soil Characteristics

Appendix B contains a table of the SSURGO soil series for the watershed. A total of 46 soil types exist in the watershed, although two types, Drummer silty clay loam (0-2 percent slopes) and Flanagan silt loam (0-2 percent slopes), cover more than 55 percent of the watershed (42.3 and 13.6 percent, respectively). All other individual soil types represent less than 6 percent of the total watershed area. The appendix also contains the area, dominant hydrologic soil group, and k-factor range. Each of these characteristics is described in more detail in the following paragraphs.

Figure 2-3 shows the hydrologic soils groups found within the Saline Branch Watershed. Hydrologic soil groups are used to estimate runoff from precipitation. Soils are assigned to one of four groups. They are grouped according to the infiltration of water when the soils are thoroughly wet and receive precipitation from long-duration storms:

- Group A: Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.
- Group B: Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.
- Group C: Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.
- Group D: Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

While hydrologic soil groups A, B, C, B/D, and C/D are all found within the watershed, groups B/D and C are the most common types and represent 57 and 23 percent of the watershed, respectively. Group B/D soils are "placed in group D based on the presence of a water table within 24 inches of the surface"; however, if these soils can be adequately drained, then they are assigned to dual hydrologic groups (A/D, B/D, C/D)

[4] https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=IL

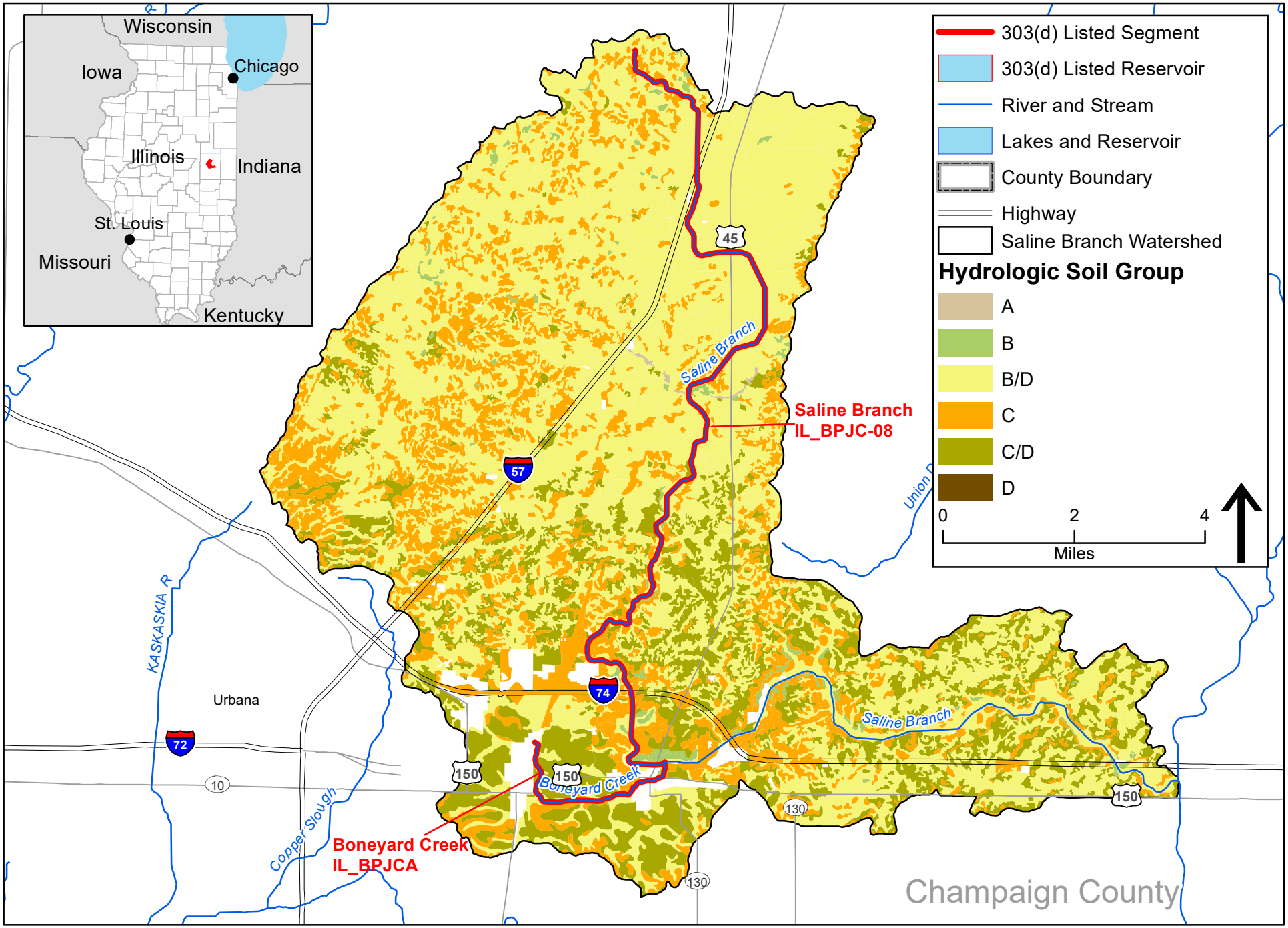

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Figure 2-3: Saline Branch Watershed, Soils

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based on their saturated hydrologic conductivity and the water table depth when drained. The first letter applies to the drained condition and the second to the undrained condition. For the purpose of hydrologic soil group, adequately drained means that the seasonal high-water table is kept 24 inches below the surface in a soil where it would be higher in a natural state. (NRCS 2009).

A commonly used soil attribute is the soil erodibility factor (K-factor). The K-factor indicates the susceptibility of a soil to sheet and rill erosion by water. The K-factor is one of the factors used in the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion. Losses are expressed in tons per acre per year. These estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion by water (Web Soil Survey 2013).

The distribution of K-factor values in the Saline Branch watershed range from 0.22 to 0.43, as shown in **Figure 2-4**.

2.5 Population

The Census 2015 TIGER/Line data[5] and geographic shapefiles of census block groups[6] were downloaded from the U.S. Census Bureau for the entire state of Illinois. All census blocks that have geographic center points (centroids) within the watershed were selected and tallied in order to provide an estimate of populations in all census blocks both completely and partially contained by the watershed boundary. Given that the optimal size of a census block group is 1,500 people, and 62 block group centroids are located within the watershed, it is estimated that approximately 93,000 people reside in the Saline Branch watershed. The major municipalities in the watershed are shown in Figure 1-1. The largest urban development is in the southern corner of the watershed and consists of portions of the city of Champaign (population of approximately 87,500) and Urbana (population of approximately 42,000) as well as portions of the surrounding Champaign-Urbana metropolitan area.

2.6 Climate, Pan Evaporation, and Streamflow

2.6.1 Climate

East Central Illinois has a temperate climate with hot summers and cold, snowy winters. Monthly precipitation data from the Champaign 3 Savoy, IL US station (station USC00118740) in Champaign County were extracted from the National Centers for Environmental Management (NCEI) database[7] [formerly the National Climate Data Center (NCDC)] for the years of 1902 through 2019. The data station in Champaign, Illinois was chosen to be representative of precipitation throughout the Saline Branch watershed.

Table 2-4 contains the average monthly precipitation along with average high and low temperatures for the period of record. The average annual precipitation is approximately 38 inches. May and June are historically the wettest months while January and February are typically the driest months.

[5] https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html
[6] https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-block-maps.html
[7] https://www.ncdc.noaa.gov/cdo-web/datatools/findstation

Table 2-4 Average Monthly Climate Data in Savoy, Illinois

Month	Total Precipitation (inches)	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)
January	2.1	33.8	18.2
February	2.0	37.7	21.5
March	3.1	49.4	30.9
April	3.8	62.2	41.1
May	4.2	73.2	51.7
June	4.1	82.4	60.9
July	3.9	85.8	64.8
August	3.6	83.9	62.8
September	3.3	78.1	55.5
October	2.9	65.9	44.1
November	2.8	50.4	32.8
December	2.4	37.5	22.7
Average	**38.2***	**61.7**	**42.3**

***Average Annual Precipitation.**

2.6.2 Pan Evaporation

Pan evaporation data[8] are available from nine locations across Illinois through the Illinois State Water Survey (ISWS) website. The Urbana station was chosen to be representative of pan evaporation conditions for the Saline Branch watershed. This station was chosen for its proximity to the 303(d)-listed water bodies in east central Illinois and the completeness of the dataset. The average monthly pan evaporation at the Urbana station for the years 1980 to 2014 yields an average annual pan evaporation of 36.33 inches. Actual evaporation is typically less than pan evaporation, so the average annual pan evaporation was multiplied by 0.75 to calculate an average annual evaporation of 27.25 inches.

[8] https://www.isws.illinois.edu/warm/reservoirs/contact.asp

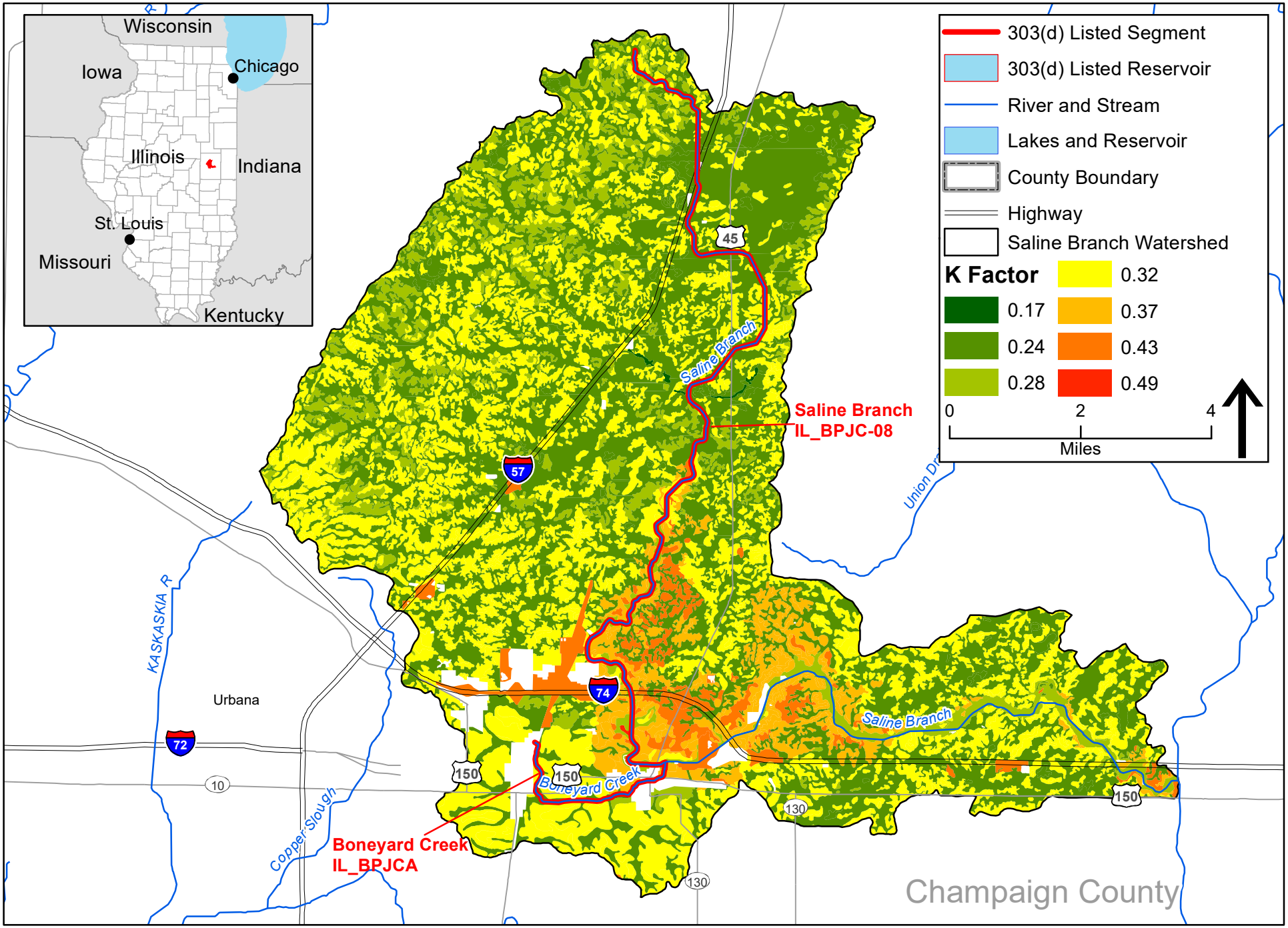

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Figure 2-4: Saline Branch Watershed, K-Factor

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2.6.3 Streamflow

Analysis of the Saline Branch watershed requires an understanding of flow throughout the drainage area. Two gages, shown in **Figure 2-5**, operated in cooperation between the National Weather Service (NWS) and the USGS are located on Saline Branch and Boneyard Creek near Urbana, IL (**Table 2-5**). Both gages are located in predominantly urbanized portions of the watershed and can be used for flows through these areas. A nearby gage from a more rural area (USGS 03336900 Salt Fork near St. Joseph, IL) may also be used to estimate flows in the northern portion of the watershed.

Table 2-5 Streamflow Gages for the Saline Branch Watershed[9]

Gage Number	Name	Data Available	POR	Data Count
SBUI2 (NWS)/ USGS 03337570	Saline Branch Above 1700E Near Urbana, IL	Gage Height, Discharge	2009-2019	3,882
BYBI2 (NWS)/ USGS 03337100	Boneyard Creek at Lincoln Ave at Urbana, IL	Gage Height, Discharge	2001-2019	6,540
USGS 03336900	Salt Fork Near St. Joseph, IL	Gage Height, Discharge	1958-2019	17,726

Streamflow data from any of these gages may be used to estimate flow values for TMDL development for locations on the impaired water bodies in the using the drainage area ratio method, represented by the following equation:

$$Q_{gaged}\left(\frac{Area_{ungaged}}{Area_{gaged}}\right)=Q_{ungaged}$$

Where,

Q_{gaged} = Streamflow of the gaged basin
$Q_{ungaged}$ = Streamflow of the ungaged basin
$Area_{gaged}$ = Area of the gaged basin
$Area_{ungaged}$ = Area of the ungaged basin

The assumption behind the equation is that the flow per unit area is equivalent in watersheds with similar characteristics. Therefore, the flow per unit area in the gaged watershed multiplied by the area of the ungaged watershed estimates the flow for the ungaged watershed.

Data downloaded through the USGS for the surrogate gage for the available period of record will be adjusted to account for point source influence in the watershed upstream of the gaging station. Average daily flows from all National Pollutant Discharge Elimination System (NPDES) permitted facilities upstream of the surrogate USGS gages are subtracted from the gaged flow prior to flow-per-unit-area calculations. The resulting estimates account for flows associated with precipitation and overland runoff only. Average daily flows from permitted NPDES discharges upstream of the impaired segments in the Saline Branch watershed can then be added back into the equation to more accurately reflect estimated daily streamflow conditions in a given segment.

[9] https://waterdata.usgs.gov/IL/nwis/current/?type=dailydischarge&group_key=basin_cd

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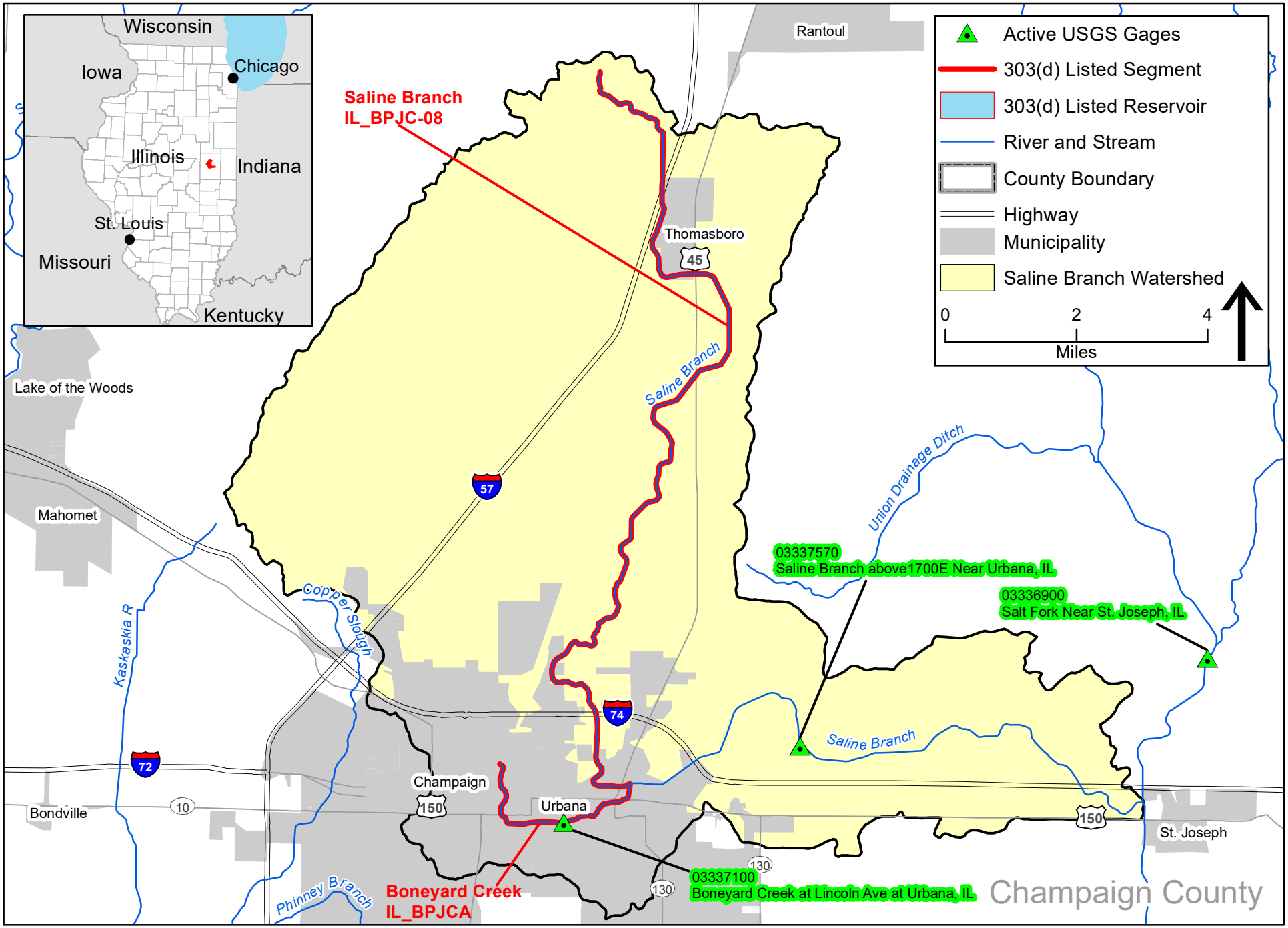

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Figure 2-5: Saline Branch Watershed, Active USGS Gages

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Section 3

Saline Branch Watershed Public Participation

3.1 Saline Branch Watershed Public Participation and Involvement

Public knowledge, acceptance, and follow-through are necessary to implement a plan to meet recommended TMDLs and WBPs. It is important to involve the public as early in the process as possible to achieve maximum cooperation and counter concerns as to the purpose of the process and the regulatory authority to implement any recommendations.

Illinois EPA, along with CDM Smith, will hold a public meeting for the Saline Branch watershed at the completion of Stages 1 and 3. Comments received through the public meeting process will be included in an appendix. This section will be updated following each public meeting.

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Section 4

Saline Branch Watershed Water Quality Standards

4.1 Illinois Water Quality Standards

Water quality standards are developed and enforced by the state to protect the "designated uses" of the state's waterways. In the state of Illinois, setting the water quality standards is the responsibility of the Illinois Pollution Control Board (IPCB). Illinois is required to update water quality standards every 3 years in accordance with the CWA. The standards requiring modifications are identified and prioritized by Illinois EPA, in conjunction with USEPA. New standards are then developed or revised during the three-year period.

Illinois EPA is also responsible for developing scientifically based water quality criteria and proposing them to the IPCB for adoption into state rules and regulations. The Illinois water quality standards are established in the Illinois Administrative Rules Title 35, Environmental Protection; Subtitle C, Water Pollution; Chapter I, Pollution Control Board; Part 302, Water Quality Standards[1].

4.2 Designated Uses

The waters of Illinois are classified into four primary categories of narrative and numeric water quality standards for surface waters, which include: General Use Standards, Public and Food Processing Water Supplies Standards, Secondary Contact and Indigenous Aquatic Life Standards, and Lake Michigan Basin Water Quality Standards[2]. The Saline Branch watershed is listed for impairment of the aquatic life use by pH, dissolved oxygen, copper, and total phosphorous under the General Use Standards.

4.2.1 General Use

The General Use classification is defined by IPCB as standards that "are intended to protect aquatic life, wildlife, agricultural, primary contact, secondary contact, and most industrial uses." They are also intended to "ensure the aesthetic quality of the state's aquatic environment and to protect human health from disease or other harmful effects that could occur from ingesting aquatic organisms taken from surface waters of the state."

4.3 Water Quality Criteria

According to the Illinois EPA Integrated Report (IEPA 2018), aquatic life use assessments in streams are typically based on the interpretation of biological information, physiochemical water data, and physical habitat. The primary biological measures used are the fish Index of Biotic Integrity (fIBI), the macroinvertebrate Index of Biotic Integrity (mIBI), and the Macroinvertebrate

[1] http://www.ilga.gov/commission/jcar/admincode/035/03500302sections.html
[2] https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx

Biotic Index (MBI). Physical habitat information used in assessments includes quantitative and qualitative measures of stream bottom composition and qualitative descriptors of channel and riparian conditions. Physiochemical water data used include measures of "conventional" parameters (e.g. dissolved oxygen [DO], pH, and temperature), priority pollutants, non-priority pollutants, and other pollutants.

Table 4-1 presents the numeric water quality standards of the potentila causes of impairment in the Saline Branch watershed.

Table 4-1 Summary of Numeric Water Quality Standards for Potential Causes of Stream Impairments in Saline Branch Watershed[3]

Parameter	Units	General Use Water Quality Standard	Regulatory Reference
pH	s.u.	Between 6.5 and 9.0	302.204
Dissolved Oxygen	mg/L	*March through July* ≥5.0 minimum & ≥6.0 7-day daily mean averaged over 7 days; *August through February* ≥3.5 minimum, ≥4.0 7-day minimum averaged over 7 days & ≥5.5 30-day daily mean[1]	302.206(b)[1]
Copper (dissolved)	µg/L	Acute = $e^{A + B\ln(H)}$ x 0.960* where A = -1.464 and B = 0.9422 Chronic = $e^{A + B\ln(H)}$ x 0.960* where A = -1.465 and B = 0.8545	302.208(e)

mg/L = milligram per liter
µg/L = micrograms per liter
H = hardness
* = Conversion factor multiplier for dissolved metals
[1]302.206(d) provides further information on detailed calculations for determining the acute and chronic standards for DO

4.4 Illinois Nutrient Loss Reduction Strategy

In addition to the water quality standards provided above, the Illinois EPA has also established water quality guidelines for nutrients in accordance with the Illinois Nutrient Loss Reduction Strategy (NLRS)[3]. The NLRS was developed in response to hypoxia in the Gulf of Mexico and all 12 states within the Mississippi River Basin were called upon by the USEPA to reduce nutrient loads flowing into the Mississippi River. Water quality goals will be incorporated into the WBPs based on the NLRS, which calls for an overall 45% load reduction of total phosphorus leaving the state of Illinois, and an interim target of 25% load reduction by 2025. A WBP will be developed using the interim total phosphorus load reduction goal of 25%. The WBP for the Saline Branch watershed will include a comprehensive suite of best management practices (BMPs) for reducing loads from identified watershed sources.

[3] https://www2.illinois.gov/sites/agr/Resources/NutrientLoss/Pages/default.aspx

4.5 Potential Pollutant Sources

In order to properly address the conditions within the Saline Branch watershed, potential pollutant sources must be investigated for the pollutants where TMDLs will be developed. **Table 4-2** provides a summary of the potential sources associated with the listed potential causes for the 303(d) listed segment in this watershed.

Table 4-2 Impaired Water Bodies in Saline Branch Watershed

Segment ID	Segment Name	Potential Causes of Impairment	Designated Use	Potential Sources (as identified by the 2018 303(d) list)
BPJC-08	Saline Branch Drainage Ditch	**pH**	Aquatic Life	Source Unknown
BPJCA	Boneyard Creek	**Dissolved Oxygen**	Aquatic Life	Stormsewers, Urban Runoff
		Copper	Aquatic Life	Stormsewers, Urban Runoff
		Phosphorous (Total)	Aquatic Life	Stormsewers, Urban Runoff

Bold Causes of Impairment have numeric water quality standards and TMDLs will be evaluated.
Italicized Causes of Impairment do not have numeric water quality standards and WBP will be developed where water quality targets have been provided by Illinois EPA.

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Section 5

Saline Branch Watershed Data and Potential Pollution Sources

In order to further characterize the Saline Branch watershed, a wide range of data were collected and reviewed. Water quality data for impaired stream segments in the Saline Branch watershed, as well as information on potential point and nonpoint sources within the watershed, were compiled from a number of data sources. This information is presented and discussed in further detail in the remainder of this section.

5.1 Water Quality Data

Illinois EPA monitoring programs that contribute data to the assessment of streams include the Ambient Water Quality Monitoring Network, the Pesticide Monitoring Subnetwork, Facility-Related Stream Surveys, Intensive Basin Surveys, and the Fish Contaminant Monitoring Program[1]. Much of the data used for this report came from the Ambient Water Quality and Lake Monitoring Programs and Intensive Basin Surveys. The Ambient Water Quality Network and Ambient Lake Monitoring Programs include 146 fixed stream stations statewide that are sampled every 6 weeks. Additional data are collected during Intensive Basin Surveys, which are typically conducted on a 5-year cycle and focus on basins where intensive data are currently lacking or where historical data need updating. Additional information on Illinois EPA's monitoring programs can be found in the "Illinois Water Monitoring Strategy[2]."

Data from a total of six historical water quality stations located on the two impaired stream segments within the Saline Branch watershed were identified and reviewed for this report. These water quality data were provided by the Illinois EPA. **Figure 5-1** shows the water quality data stations within the watershed that contain data relevant to the impaired segments.

The impaired water body segments in the Saline Branch watershed were presented in Section 1. Refer to Table 1-1 for impairment information specific to each segment. The following sections address stream impairments to be addressed in this TMDL report. Data are summarized by impairment and discussed in relation to the relevant Illinois numeric water quality standard. Data summaries provided in this section include all available date ranges of collected data.

[1] https://www2.illinois.gov/epa/topics/water-quality/monitoring/Pages/river-and-stream.aspx
[2] https://www2.illinois.gov/epa/Documents/epa.state.il.us/water/water-quality/monitoring-strategy/monitoring-strategy-2015-2020.pdf

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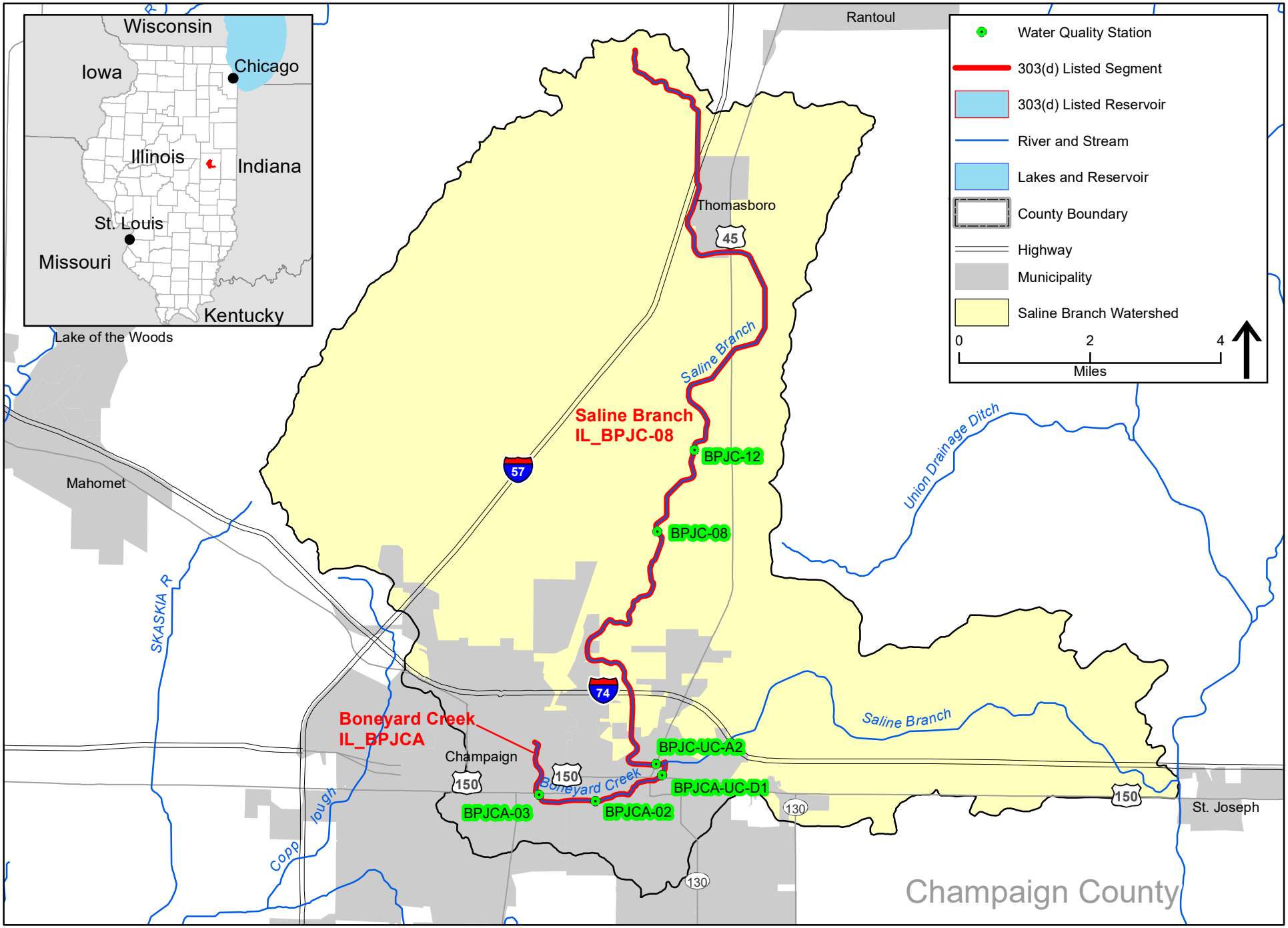

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Figure 5-1: Saline Branch Watershed, Water Quality Stations

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5.1.1 Stream Water Quality Data

There are two impaired stream segments within the Saline Branch watershed (Figure 5-1). There are three water quality stations with available data relevant to impairments on Saline Branch Drainage Ditch (BPJC-08), with data from 2001 through 2016. Three water quality stations with applicable water quality data are located on Boneyard Creek (BPJCA), also with data from 2001 through 2016. The data summarized in this section include water quality data for the impaired constituents (pH, DO, copper, and TP). All historical water quality data for the impaired segments in the Saline Branch watershed are available in Appendix C and additional water quality data for other parameters may be used during Stage 3 TMDL development to support modeling efforts.

5.1.1.1 pH

Saline Branch segment BPJC-08 is listed for impairment of the aquatic life use by elevated pH. **Table 5-1** summarizes available historical pH data for this segment. The current general use water quality standard includes a range of pH values that are acceptable. The water quality standard designates a pH between 6.5 and 9.0 as supporting the aquatic life use.

Table 5-1 Existing pH Data for the Saline Branch Drainage Ditch segment BPJC-08

Illinois WQ Standard (s.u.)	Period of Record and Number of Data Points	Mean	Maximum	Minimum	Number of Exceedances	Sample Locations
6.5 ≤ and ≥ 9.0	2001-2016; 16	8.01	9.43	6.88	1	BPJC-08, BPJC-12, BPJC-UC-A2

The summary of data presented in Table 5-1 reflects single samples from locations on the impaired segment compared to the standard. One exceedance was noted in the available dataset for Saline Branch Drainage Ditch segment BPJC-08, representing 0.04% of available pH measurements. **Figure 5-2** shows the pH measurements collected over time on this segment.

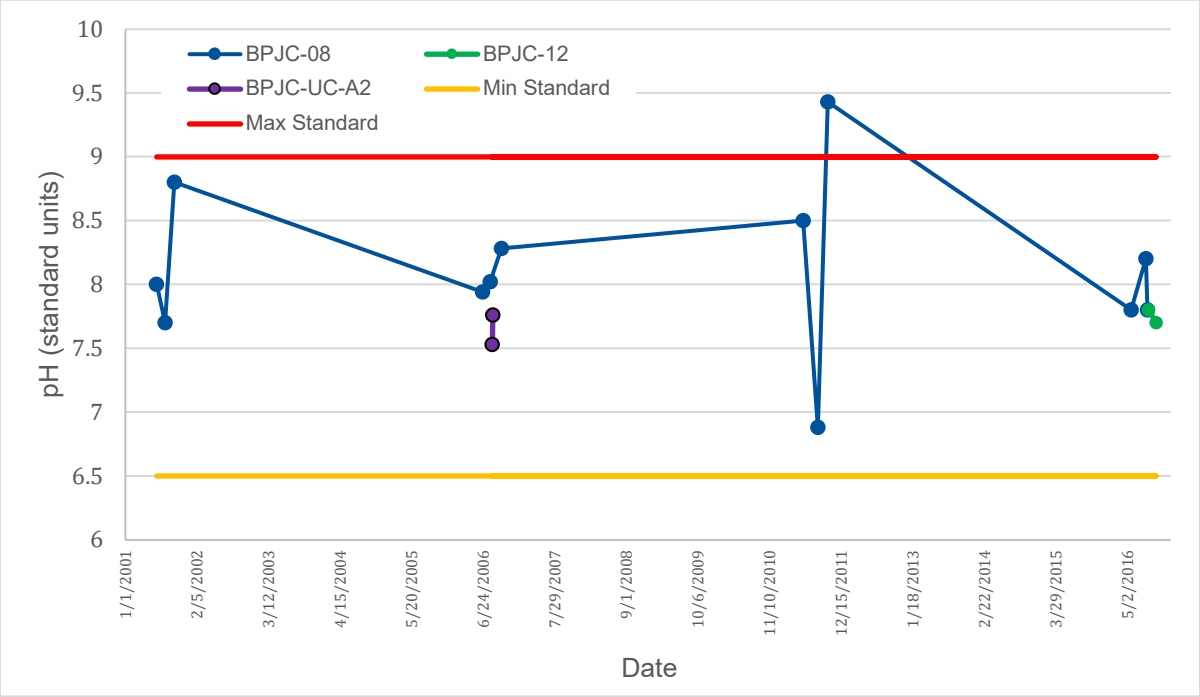

Figure 5-2: pH measurements for Saline Branch Drainage Ditch

The available dataset for segment BPJC-08 is limited with only 12 samples collected from 2001-2016. However, the 2016 sample represents the most recent available data at the time of the Stage 1 report. Additional data will be included in the final TMDL report, if it becomes available. Only 1 of the total pH samples collected during this time period does not fall between the currently applicable standard range for this segment.

5.1.1.2 Dissolved Oxygen

Boneyard Creek segment BPJCA is listed for impairment of the aquatic life use by low DO concentrations. **Table 5-2** summarizes available historical DO data on this segment. The general use water quality standard for DO provides seasonal instantaneous minimum and minimum weekly (7-day) average concentrations for DO in streams. Due to inconsistent and limited datasets, only the instantaneous minimum standards of 5.0 mg/L for March through July and 3.5 mg/L for August through February were used to identify samples that were below the standard in this section of the report. The available datasets were not assessed for impairment of the weekly (7-day) minimum DO limits; however, future data analyses may take the weekly standards into account.

Table 5-2 Existing DO Data for Boneyard Creek segment BPJCA

Illinois WQ Standard (mg/L)	Period of Record and Number of Data Points	Mean	Maximum	Minimum	Number of Exceedance	Sample Locations
5.0[(1)], 3.5[(2)]	2001-2016; 8	6.56	8.65	3.97	1	BPJCA-02, BPJCA-03, BPJCA-UC-D1

[(1)] Instantaneous Minimum *March-July*
[(2)] Instantaneous Minimum *August-February*

The summary of data presented in Table 5-2 reflects single samples from the segment compared to the standards during the appropriate months. Eight samples were available for the impaired segment BPJCA. One sample fell below the Illinois water quality standard for the instantaneous minimum from March through July. **Figure 5-3** shows the DO measurements collected over time at the segment.

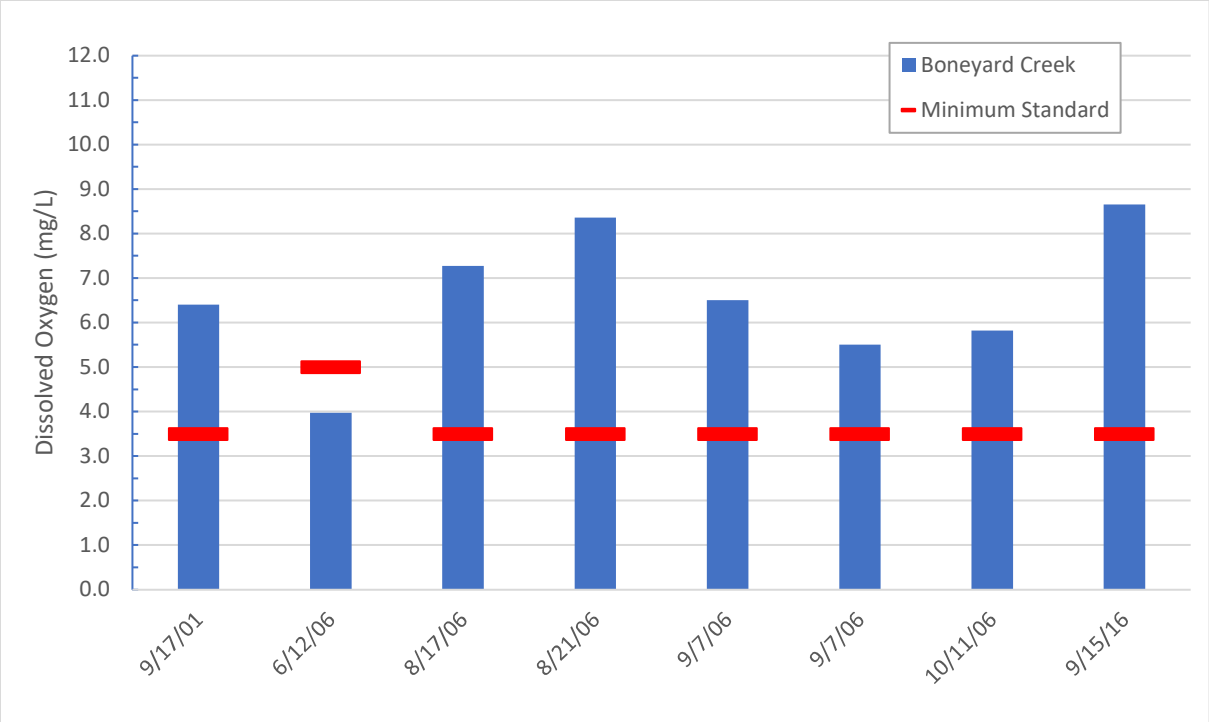

Figure 5-3: Dissolved Oxygen concentrations on Boneyard Creek

Each of the DO samples in the impaired segment of Boneyard Creek (BPJCA) were collected between June and October. One sample from the impaired segment is subject to the seasonal instantaneous minimum of 5.0 mg/L, and is the sample that was below the standard; the remainder are subject to the seasonal instantaneous minimum of 3.5 mg/L.

5.1.1.3 Copper

Boneyard Creek segment BPJCA is listed for impairment of the aquatic life use caused by elevated dissolved copper concentrations. Acute and chronic general use water quality standards for copper are dependent on sample hardness and vary with the total hardness of the sampled water. **Table 5-3** summarizes available historical copper data on this segment while **Table 5-4** shows all the data along with the calculated standards.

Table 5-3 Existing Dissolved Copper Data Summary for Boneyard Creek segment BPJCA

Illinois WQ Standard (µg/L)	Period of Record and Number of Data Points	Mean (µg/L)	Maximum (µg/L)	Minimum (µg/L)	Number of Exceedances	Sample Locations
varies[(1)]	2001-2006; 4	14.53	41.00	3.50	1	BPJCA-UC-D1

[(1)] Hardness-dependent

Table 5-4 Available Dissolved Copper Data for Boneyard Creek segment BPJCA

Sampling Location	Sample Date	Result (µg/L)	Hardness (mg/L)	Acute Standard (µg/L)	Chronic Standard (µg/L)
BPJCA-UC-D1	2001-09-17	10	234	37.91	23.47
BPJCA-UC-D1	2006-06-12	3.5	310	49.41	29.85
BPJCA-UC-D1	2006-08-21	3.6	330	52.41	31.48
BPJCA-UC-D1	2006-10-11	41	98	16.70	11.16

The summary of data presented in Table 5-3 reflects single samples from the impaired segment compared to the hardness-dependent standard. One exceedance was noted in the available dataset for Boneyard Creek, representing 25 percent of available dissolved copper measurements.

5.1.1.4 Total Phosphorus

Boneyard Creek segment BPJCA is listed for impairment of the aquatic life use due to elevated total phosphorus concentrations. **Table 5-5** summarizes historical phosphorus data collected on the impaired segment. **Figure 5-4** shows the total phosphorus measurements collected over time on the impaired segment. Figure 5-4 shows that total phosphorus concentrations tend to be higher during late summer/early fall with an abnormally high result in October 2006. Late summer/early fall is also at the end of the agricultural growing season and during low stream flows.

Table 5-5 Existing Total Phosphorus Data for Boneyard Creek segment BPJCA

Illinois WQ Goal	Period of Record and Number of Data Points	Mean (mg/L)	Maximum (mg/L)	Minimum (mg/L)
25% load reduction	2001-2006; 8	0.244	0.765	0.150

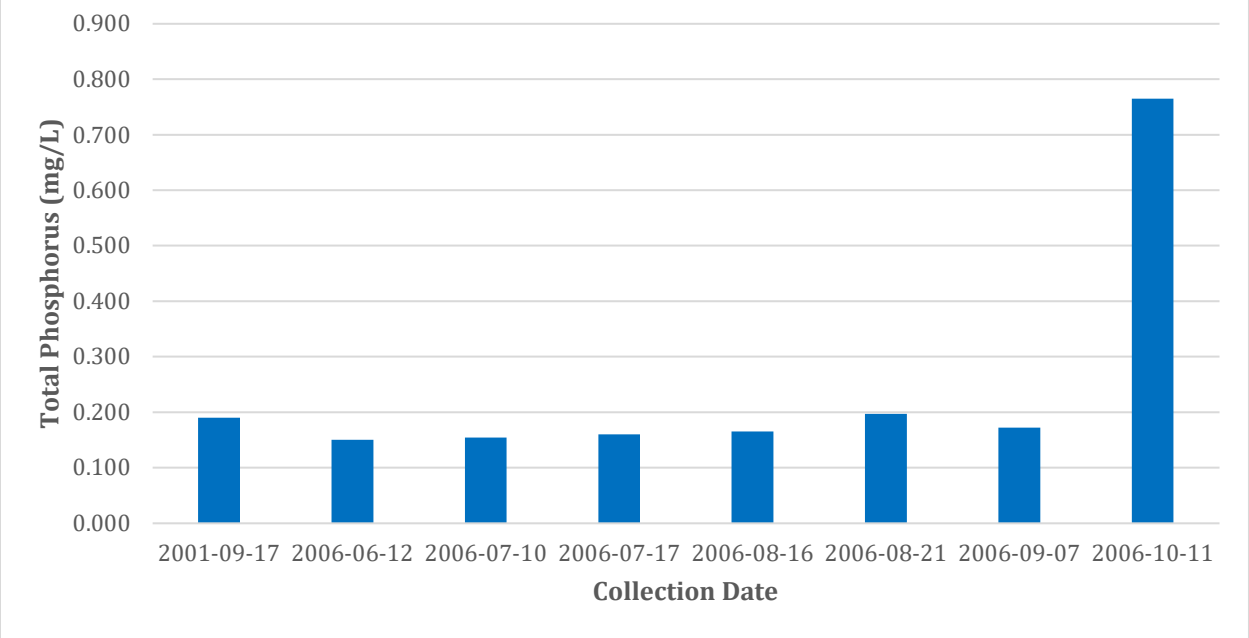

Figure 5-4: TP concentrations on Boneyard Creek

5.2 Point Sources

There are three active point sources within the Saline Branch watershed that discharge to or upstream of the impaired segments. Note that the Urbana-Champaign Sanitary District discharges to the Saline Branch Drainage Ditch downstream of the impaired segment. **Table 5-6** contains permit information for these point sources while **Figure 5-5** shows the locations of outfalls for each facility. Permit limits and discharge monitoring reports will be analyzed and further detailed during Stage 3 TMDL development.

Table 5-6 Permitted Facilities Discharging to or Upstream of the Impaired Segments in the Saline Branch Watershed

Facility ID	Facility Name	Design Average/Design Maximum Flow (mgd)	Receiving Water
IL0004545	Canadian National/Illinois Central Railroad	0.00288 (avg)	Unnamed Ditch Tributary to Saline Branch Drainage Ditch
IL0027278	Country Manor Mobile Home Park – STP	0.003/0.009	Saline Branch Drainage Ditch
IL0072052	Safety-Kleen Systems, Inc.	Intermittent Stormwater Discharge	Saline Branch Drainage Ditch

Municipal separate storm sewer (MS4) permits within the watershed exist for the cities of Champaign and Urbana. MS4 discharges have the potential to impact both impaired segments within the watershed. Storm sewers and urban runoff were listed as potential sources of pollutants for Boneyard Creek on the 303(d) list. Boneyard Creek flows through the southern portion of the watershed where the majority of the land draining to it has been developed.

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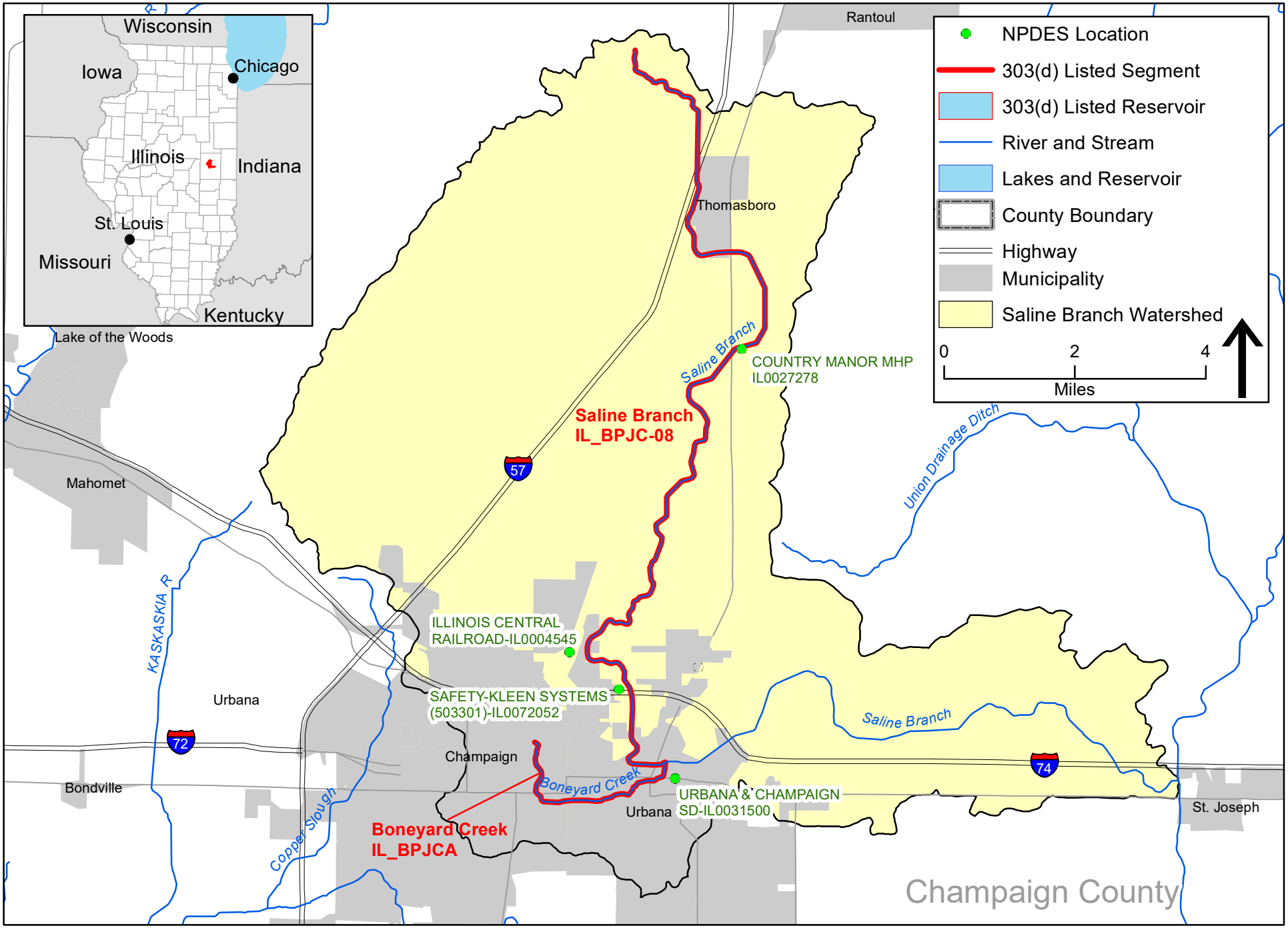

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Figure 5-5: Saline Branch Watershed, NPDES Locations

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5.3 Nonpoint Sources

A variety of nonpoint sources of pollutant loading to the impaired segments have been identified in the Saline Branch watershed. This section will discuss factors potentially impacting nonpoint source loads such as site-specific cropping practices, animal operations, and area septic systems which can affect pH levels, dissolved oxygen and total phosphorus concentrations. Naturally occurring rocks and minerals in the soil may also affect pH levels. Data were collected through communication with the local NRCS, Soil and Water Conservation District, public health departments, and county tax department officials.

5.3.1 Crop Information

More than 70 percent of the land found within the Saline Branch watershed is devoted to agricultural activities. Of the agricultural lands, corn and soybean farming account for 38 percent and 33 percent of the watershed, respectively. Note that the land draining to the impaired segment of the Saline Branch Drainage Ditch is much more rural and agricultural than the land surrounding Boneyard Creek which is almost fully developed.

Tillage practices can be categorized as conventional till, reduced till, mulch till, and no till. The percentage of each tillage practice for corn, soybeans, and small grains by county are generated by the Illinois Department of Agriculture (IDA) from County Transect Surveys[3]. Data specific to the Saline Branch watershed were not available; however, Champaign County practices were available and are shown in **Table 5-7**.

Table 5-7 Tillage Practices in Champaign County, Illinois

Tillage System	Corn		Soybean		Small Grain	
	2015	2018	2015	2018	2015	2018
Conventional	75.0%	93.6%	8.0%	20.4%	0.0%	0.0%
Reduced - Till	13.0%	5.6%	25.0%	41.6%	0.0%	0.0%
Mulch - Till	10.0%	0.6%	41.0%	14.2%	0.0%	0.0%
No - Till	2.0%	0.3%	25.0%	23.7%	100.0%	25.0%

Data as reported by agency and some columns do not add up to 100%.

According to the County Transect Survey summary report, fields planted conventionally leave less than 15% of the soil surfaced covered with crop residue after planting, while mulch-till leaves at least 30% of the residue from the previous crop remaining on the soil surface after being tilled and planted. Reduced-till falls between conventional and mulch (greater than 15% but less than 30%) and no-till practices leave the soil virtually undisturbed from harvest through planting. Residue is important because it shields the ground from the eroding effects of rain and helps retain moisture for crops.

Information on field tiling practices was also sought as field drains can influence the timing and amount of water delivered to area streams and reservoirs as well as deliver dissolved nutrients

[3] https://www2.illinois.gov/sites/agr/Resources/LandWater/Pages/Illinois-Soil-Conservation-Transect-Survey-Reports.aspx

from fields to receiving waters. Local NRCS offices reported, however, that tile drainage is very rare within the watershed[4].

5.3.2 Animal Operations

Information on commercial animal operations is available from the NASS. Knowing the number of animal units in a watershed is useful in TMDL development as grazing animals have the potential to increase erosion and contribute nutrients through manure. Although watershed-specific data are not available, countywide data for Champaign county are presented in **Table 5-8**[5, 6]. Overall, animal numbers are trending downward in the area.

Table 5-8 Champaign County Animal Population

Livestock Type	2012	2017	Percent Change
Cattle and Calves	12,135	7,300	-39.8%
Beef	(D)	(D)	--
Dairy	(D)	(D)	--
Hogs and Pigs	9,852	10,117	2.7%
Poultry	8,751	7,381	-15.7%
Sheep and Lambs	440	460	4.4%
Horses and Ponies	763	410	-46.3%

(D) – Withheld to avoid disclosing data for individual farms

Local NRCS and SWCD officials could not be reached during Stage 1 TMDL development, but information obtained by officials from surrounding counties indicate that there are likely no large animal populations given that much of the county is lacking in bottomland floodplain[7].

5.3.3 Septic Systems

Many households in rural areas of Illinois that are not connected to municipal sewers make use of onsite sewage disposal systems, or septic systems. There are many types of septic systems, but the most common septic system is composed of a septic tank draining to a septic field, where nutrient removal occurs. However, the degree of nutrient removal is limited by soils and system upkeep and maintenance.

Across the U.S., septic systems have been found to be a significant source of phosphorous pollution and failing or leaking septic systems contribute to fecal coliform pollution, both of which can contribute to low DO and affect pH levels in receiving waters. Animal waste, urban runoff, and permitted point sources can also contribute. Information on the extent of sewered and non-sewered municipalities was obtained from the Champaign-Urbana Public Health District. Officials stated that, in general, properties within municipalities are generally on a municipal sewer system, with pockets of properties within the city/town limits that have individual septic

[4] Klingler, L. 2019, November 11. Natural Resource Conservation Service (NRCS) - Crawford County, District Conservationist. Email correspondence

[5] https://www.nass.usda.gov/Publications/AgCensus/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Illinois/

[6] https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Illinois/

[7] Earles, S. 2019, November 15. Soil and Water Conservation District (SWCD) - Ford County, Resource Conservationist. Email correspondence

systems due to various reasons such as distance from a municipal hookup. Outside of municipalities, properties are generally on individual septic systems within the county[8].

5.4 Watershed Studies and Other Watershed Information

Previous efforts completed within the watershed are listed below, although this list may not be exhaustive. Reports will be reviewed, and data will be incorporated into Stage 3 where appropriate and relevant.

1978 – The Boneyard Creek Commission contracted the development of a Master Plan for Boneyard Creek, with the goal of developing the creek as a multi-purpose community asset for watershed management, recreation and urban beautification. The plan focused on the implementation of flood control measures, the improvement and maintenance of water quality, the development of the Creek corridor activity potentials, and improvements of the Creek appearance or aesthetic quality[9].

1994 – A technical report was developed to determine the flow capacity of Boneyard Creek by using a hydraulic performance graph. The maximum capacity for individual reaches, as well as their maximum uniform capacity were determined by using the hydraulic performance graph of each individual reach; and the major bottlenecks causing flooding in the University of Illinois campus portion of the creek were identified[10].

1997 – A technical report was developed to determine the channel capacity of Boneyard Creek through the City of Urbana, Illinois. The locations of bottlenecks that were most critical to flooding were identified and the improved capacities with these bottlenecks removed were investigated[11].

2007 – The Illinois EPA commissioned a TMDL report for the Salt Fork Vermilion River watershed, which includes the Saline Branch watershed discussed in this report. This report found that Boneyard Creek segment BPJCA was impaired for habitat assessment, DDT, hexachlor, and PCB; Saline Branch segment BPJC-08 was impaired for DO, total nitrogen, and habitat assessment; and Saline Branch BPJC-06 was impaired for boron, total ammonia, total nitrogen, poor habitat, fish kills, TSS, DDT, dieldrin, methoxychlor, and total phosphorus[12].

2007 – A steering committee for the Champaign County Soil and Water Conservation District developed a comprehensive watershed plan for the Salt Fork, which encompasses the Saline

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[8] Shobe, L. 2019, January 23. Champaign-Urbana Public Health District, Administrative Assistant. Email correspondence

[9] https://www.urbanaillinois.us/sites/default/files/attachments/1978%20Boneyard%20Master%20Plan.pdf

[10] https://www.researchgate.net/publication/308632348_Determination_of_Boneyard_Creek_flow_capacity_by_hydraulic_performance_graph

[11] https://www.researchgate.net/publication/32965667_Channel_Capacity_Analysis_for_Boneyard_Creek_in_Urbana_Illinois_HES_46A

[12] https://www2.illinois.gov/epa/Documents/epa.state.il.us/water/tmdl/report/salt-vermilion/salt-fork-vermilion-approved.pdf

Branch watershed discussed in this report. Water quality served as a catalyst for developing the plan, but also considered were flooding and channel stewardship, recreation, wildlife, and land use management[13].

2008 – The City of Urbana, Illinois commissioned a Master Plan for Boneyard Creek, focusing on a renewed downtown. The plan addressed enhancing the physical appearance of the creek through improvements such as naturalization, landscaping, bank stabilization, and other amenities, while maintaining the creek's primary drainage function; providing opportunities to add fencing, lighting, overlooks, and/or public art within the corridor; and facilitating adjacent property uses and creating urban design standards for public and private development along the creek[14].

2015 – The Champaign County Multi-Jurisdictional Hazard Mitigation Plan outlines several mitigation actions regarding Boneyard Creek, including removing structures from within the creek floodway, mitigating flooding hazards with adequate stormwater detention facilities, and acquiring properties located within the floodplain[15].

2019 – The Illinois Natural Resource Damage Assessment, which authorizes Natural Resource Trustees to seek compensation for the public for injuries to natural resources, established the Saline Branch Crystal Lake Park project in Urbana, IL. The project includes stream habitat enhancement in the form of rock riffles and deeper pools along with bank stabilization and vegetation enhancements[16].

[13] http://www.ccswcd.com/media/files/.33.pdf
[14] https://www.urbanaillinois.us/sites/default/files/attachments/Boneyard%20masterplan_Final.pdf
[15] https://www.urbanaillinois.us/sites/default/files/attachments/Hazard%20Mitigation%20Plan%20-%20Final%20Draft%20August%202015.pdf
[16] https://www.dnr.illinois.gov/programs/NRDA/Documents/FINAL%20Rest%20Notice%20for%20Saline%20Br%20Restoration%20Assistance.pdf

Section 6

Approach to Developing TMDL and Identification of Data Needs

Illinois EPA is currently developing TMDLs for pollutants that have numeric water quality standards. Of the pollutants listed for causing impairment in the Saline Branch watershed, pH, DO and copper are the parameters for which numeric water quality standards currently exist. In addition, load reductions goals exist for total phosphorus based on the Illinois NLRS. Refer to Table 1-1 for a full list of potential causes of impairment.

6.1 Simple and Detailed Approaches for Developing TMDLs

The range of analyses used for developing TMDLs varies from simple to complex. Examples of a simple approach include mass-balance, load-duration, and simple watershed and receiving water models. Detailed approaches incorporate the use of complex watershed and receiving water models. Simplistic approaches typically require less data than detailed approaches and therefore these are the analyses recommended for the watershed. Establishing a link between pollutant loads and resulting water quality is one of the most important steps in developing a TMDL. As discussed above, this link can be established through a variety of techniques. The objective of the remainder of this section is to recommend approaches for establishing these links for the constituents of concern in the Saline Branch watershed.

6.2 Additional Data Needs for TMDL and Load Reduction Development in the Saline Branch Watershed

Table 6-1 contains summary information regarding data availability for all impairments to be addressed by TMDLs and water quality goals in the Saline Branch watershed. The available datasets for assessing impairments on Boneyard Creek segment BPJCA are generally sufficient for basic TMDL and water quality goal calculations and model development.

There are eight data points for DO in impaired stream segment BPJCA. A TMDL could potentially be developed with this limited dataset, however, in order to develop a more robust model for this segment, additional data pertaining to the stream segment's impairments may need to be collected. Sample collection at various times of year and over a range of flow conditions would aid in assessing the entire range of DO conditions that may occur within the segment and would provide for a more accurate depiction of potential factors influencing the DO impairments in Boneyard Creek. Additional data collection is also recommended to support model development. Specific data requirements include a synoptic (snapshot in time) water quality survey of the reach with careful attention to the location of the point source discharge. The survey should include measurements of flow, hydraulics, DO, temperature, nutrients, sediment oxygen demand (SOD), and carbonaceous biochemical oxygen demand (CBOD). The collected data would be used to support the model development and parameterization and would lend significant confidence to the TMDL conclusions.

Data for dissolved copper and total phosphorus on Boneyard Creek are limited to data collected in 2001 and 2006. The available data are adequate to develop a TMDL and load reduction, however, more recent data could confirm that the impairments still exist and make the analysis more robust.

Adequate pH data are available to develop a TMDL for Saline Branch segment BPJC-08.

Table 6-1 Data Availability and Data Needs for TMDL and Water Quality Goal Development in the Saline Branch Watershed

Impaired Segment	Impairment	Period of Record	Data Points for Impairment Assessment	Additional Data Needs
Boneyard Creek (BPJCA)	Dissolved Oxygen	2001-2016	8	Additional DO data for impairment assessment (most recent data did not violate standard); Synoptic data for flow, hydraulics, DO, temperature, nutrients, CBOD, and SOD
	Dissolved Copper	2001-2006	4	None – however, more recent data could be used to confirm impairment still exists
	Phosphorus (Total)	2001-2006	8	None
Saline Branch Drainage Ditch (BPJC-08)	pH	2001-2016	16	None

6.3 Approaches for Developing TMDLs and Water Quality Goals for Impaired Segments

6.3.1 Recommended Approach for Dissolved Oxygen

The recommended approach to TMDL development for the DO impairment in Boneyard Creek is the development and parameterization of a QUAL2K model. QUAL2K is an updated spreadsheet-based version of the well-known and USEPA-supported QUAL2E model[1]. The model simulates DO dynamics as a function of nitrogenous oxygen demand (NOD) and CBOD, atmospheric re-aeration, SOD, and phytoplankton photosynthesis and respiration. The model also simulates the fate and transport of nutrients and BOD and the presence and abundance of phytoplankton (as chlorophyll-a). Stream hydrodynamics and temperature are important controlling parameters in the model. The model is suited to steady-state simulations. It is not anticipated that an additional watershed model will be needed to develop a DO TMDL for this stream. Additional data collection is recommended for Boneyard Creek to confirm current impairment and to build a more robust model.

[1] Brown, L.C. and Barnwell, T.O. 1987. The enhanced stream water quality models QUAL2E and QUAL2E-UNCAS: documentation and user manual. EPA-600-3-87-007, US Environmental Protection Agency, Athens, GA

6.3.2 Recommended Approach for Copper and Total Phosphorus

The data review performed for Boneyard Creek showed that a single sample of abnormally high dissolved copper (and abnormally low hardness) exceeded the calculated acute and chronic standards for that particular date. The data available are adequate to develop a load duration curve for TMDL calculation. The load duration methodology uses the cumulative frequency distribution of stream flow and pollutant concentration data to estimate the allowable loads for a waterbody. Additional data collection is suggested to determine if the exceedance was an outlier and to confirm that high dissolved copper values still exist within the segment.

The recommended approach for establishing a water quality goal for total phosphorus in Boneyard Creek is a modified load duration curve method. CDM Smith will work closely with Illinois EPA to determine the target load to use based on the Illinois NLRS interim goal of 25% load reduction.

6.3.3 Recommended Approach for pH

The data review performed for Saline Branch Drainage Ditch showed that a single pH sample exceeded the maximum value standard in 2011. Additional data collection is suggested to confirm that high pH values still exist within the segment. If continued impairment is confirmed, a TMDL may be developed using alkalinity as a surrogate measure for pH or a simplistic approach that uses the pH standard range as another appropriate measure to set the LA and WLA could be used depending on data availability.

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Section 7
References

Brown, L.C. and Barnwell, T.O. 1987. The enhanced stream water quality models QUAL2E and QUAL2E-UNCAS: documentation and user manual. EPA-600-3-87-007, US Environmental Protection Agency, Athens, GA

Earles, S. 2019, November 15. Soil and Water Conservation District (SWCD) - Ford County, Resource Conservationist. Email correspondence

Boneyard Creek Comission, The. Boneyard Creek Master Plan. Volume 1: The Plan and Volume II: Detail Engineering and Cost. Retrieved from: https://www.urbanaillinois.us/sites/default/files/attachments/1978%20Boneyard%20Master%20Plan.pdf

Champaign County Regional Planning Commission (RPC). 2015. Champaign County Multi-Jurisdictional Hazard Mitigation Plan. Retrieved from: https://www.urbanaillinois.us/sites/default/files/attachments/Hazard%20Mitigation%20Plan%20-%20Final%20Draft%20August%202015.pdf

Gonzalez, J., Yen, Men Chie and Tsai, Wan-Shan. 1997. Channel Capacity Analysis for Boneyard Creek in Urbana Illinois (HES 46A). Retrieved from: https://www.researchgate.net/publication/32965667_Channel_Capacity_Analysis_for_Boneyard_Creek_in_Urbana_Illinois_HES_46A

IDA (Illinois Department of Agriculture). 2018. Illinois Soil Conservation Transect Survey Reports. Retrieved from https://www2.illinois.gov/sites/agr/Resources/LandWater/Pages/Illinois-Soil-Conservation-Transect-Survey-Reports.aspx.

IDA. 2015. Illinois Soil Conservation Transect Survey Reports. Retrieved from https://www2.illinois.gov/sites/agr/Resources/LandWater/Pages/Illinois-Soil-Conservation-Transect-Survey-Reports.aspx.

IDNR Containment Assessment Section Staff. 2019. Restoration Notice for Saline Branch Restoration Implementation Assistance; Vermilion River Watershed, Illinois, As Part of Hegeler Zinc-Lyondel Basell Companies NRDA Settlement. Retrieved from: https://www2.illinois.gov/dnr/programs/NRDA/Documents/FINAL%20Rest%20Notice%20for%20Saline%20Br%20Restoration%20Assistance.pdf

IEPA (Illinois Environmental Protection Agency). 2019. River and Stream. Retrieved from https://www2.illinois.gov/epa/topics/water-quality/monitoring/Pages/river-and-stream.aspx.

IEPA (Illinois Environmental Protection Agency). 2018. Illinois Integrated Water Quality Report and Section 303(d) List, 2018. Retrieved from: https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx.

IEPA (Illinois Environmental Protection Agency). 2014. Illinois Water Monitoring Strategy 2015 - 2020. Retrieved from https://www2.illinois.gov/epa/Documents/epa.state.il.us/water/water-quality/monitoring-strategy/monitoring-strategy-2015-2020.pdf..

IEPA (Illinois Environmental Protection Agency). 2007. Salt Fork Vermilion River Watershed TMDL Report. Retrieved from: https://www2.illinois.gov/epa/Documents/epa.state.il.us/water/tmdl/report/salt-vermilion/salt-fork-vermilion-approved.pdf

IEPA (Illinois Environmental Protection Agency). 2007. Watershed Implementation Plan for the Upper Salt Fork of the Vermilion River, Champaign and Vermilion Counties, Illinois. Retrieved from: http://www.ccswcd.com/media/files/.33.pdf

ILGA (Illinois General Assembly). 2015. Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, Part 302: Water Quality Standards. Retrieved from http://www.ilga.gov/commission/jcar/admincode/035/03500302sections.html.

ISWS (Illinois State Water Survey). Reservoir Observation Network – Contact Us. Retrieved from: https://www.isws.illinois.edu/warm/reservoirs/contact.asp

Klingler, L. 2019, November 11. Natural Resource Conservation Service (NRCS) - Crawford County, District Conservationist. Email correspondence

Shobe, L. 2019, January 23. Champaign-Urbana Public Health District, Administrative Assistant. Email correspondence

Urbana, City of. 2008. Boneyard Creek Master Plan. Retrieved from: https://www.urbanaillinois.us/sites/default/files/attachments/Boneyard%20masterplan_Final.pdf

U.S. Census Bureau (Census). 2007-Present. TIGER/Line Shapefiles. Retrieved from: https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html

U.S. Census Bureau (Census). 2010 Census – Block Maps. Retrieved from: https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-block-maps.html

USDA (U.S. Department of Agriculture). 2018. National Agricultural Statistics Service: CropScape and Copland Data Layer. Last Modified 9/12/2019. https://www.nass.usda.gov/Research_and_Science/Cropland/Release/index.php

USDA (U.S. Department of Agriculture). Illinois Nutrient Loss Reduction Strategy. Retrieved from: https://www2.illinois.gov/sites/agr/Resources/NutrientLoss/Pages/default.aspx

USDA (U.S. Department of Agriculture). 2017. Census of Agriculture: 2017 Census Volume 1, Chapter 2: County Level Data, Illinois. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Illinois/.

USDA (U.S. Department of Agriculture). 2012. Census of Agriculture: 2012 Census Volume 1, Chapter 2: County Level Data, Illinois. Retrieved from

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Wisconsin/

USDA. Published Soil Survey for Illinois. Retrieved from: https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=IL

USGS (U.S. Geological Survey). 2019. Daily Data for Illinois: Streamflow. Retrieved from https://waterdata.usgs.gov/IL/nwis/current/?type=dailydischarge&group_key=basin_cd

USGS (U.S. Geological Survey) National Elevation Dataset (NED). 2019. Retrieved from: https://catalog.data.gov/dataset/usgs-national-elevation-dataset-ned

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Appendix A

Land Use Categories

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Saline TMDL Basin

Land Cover Category	acres	Percent	Category
Corn	21,579	38%	Agriculture
Soybeans	18,676	33%	Agriculture
Developed/Low Intensity	7,155	13%	Developed
Developed/Med Intensity	3,070	5.4%	Developed
Developed/Open Space	2,707	4.7%	Developed
Developed/High Intensity	1,362	2.4%	Developed
Grass/Pasture	1,219	2.1%	Grass/Pasture
Deciduous Forest	979	1.7%	Forest
Open Water	121	0.2%	Wetlands, marshes, open water
Other Hay/Non Alfalfa	64	0.11%	Agriculture
Woody Wetlands	43	<0.1%	Wetlands, marshes, open water
Winter Wheat	32	<0.1%	Agriculture
Barren	32	<0.1%	Barren
Alfalfa	25	<0.1%	Agriculture
Sod/Grass Seed	13	<0.1%	Agriculture
Dbl Crop WinWht/Soybeans	3.8	<0.1%	Agriculture
Oats	2.6	<0.1%	Agriculture
Herbaceous Wetlands	2.6	<0.1%	Wetlands, marshes, open water
Rye	0.7	<0.1%	Agriculture
Sorghum	0.2	<0.1%	Agriculture
Total	57,086	100%	

BPJCA Subbasin

Land Cover Category	acres	Percent	Category
Developed/Low Intensity	2,203	56%	Developed
Developed/Med Intensity	1,076	28%	Developed
Developed/High Intensity	474	12%	Developed
Developed/Open Space	149	3.8%	Developed
Corn	0.1	<0.1%	Agriculture
Total	3,902	100%	

BPJC-08 Subbasin

Land Cover Category	acres	Percent	Category
Corn	16,885	43%	Agriculture
Soybeans	14,160	36%	Agriculture
Developed/Low Intensity	3,199	8.2%	Developed
Developed/Open Space	1,618	4.1%	Developed
Developed/Med Intensity	1,441	3.7%	Developed
Developed/High Intensity	773	2.0%	Developed
Grass/Pasture	599	1.5%	Grass/Pasture
Deciduous Forest	208	0.5%	Forest
Open Water	63	0.2%	Wetlands, marshes, open water
Other Hay/Non Alfalfa	40	0.1%	Agriculture
Winter Wheat	27	<0.1%	Agriculture
Alfalfa	19	<0.1%	Agriculture
Barren	15	<0.1%	Barren
Sod/Grass Seed	10	<0.1%	Agriculture
Woody Wetlands	3.6	<0.1%	Wetlands, marshes, open water
Dbl Crop WinWht/Soybeans	1.9	<0.1%	Agriculture
Herbaceous Wetlands	0.7	<0.1%	Wetlands, marshes, open water
Rye	0.4	<0.1%	Agriculture
Sorghum	0.2	<0.1%	Agriculture
Total	39,064	100%	

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Appendix B

Soil Series Data

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Table B-1: Soil Series

Mapunit Name	Hydrologic Group - Dominant	K-Factor Rock Free	Acres	Percent
Drummer silty clay loam, 0 to 2 percent slopes	B/D	0.33	24,147	42.3%
Flanagan silt loam, 0 to 2 percent slopes	C/D	0.39	7,784	13.6%
Dana silt loam, 2 to 5 percent slopes	C	0.36	3,416	6.0%
Raub silt loam, non-densic substratum, 0 to 2 percent slopes	B/D	0.34	2,780	4.9%
Catlin silt loam, 2 to 5 percent slopes	C	0.36	2,700	4.7%
Brenton silt loam, 0 to 2 percent slopes	B/D	0.35	2,398	4.2%
Clare silt loam, 2 to 5 percent slopes	C	0.34	1,792	3.1%
Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	B/D	0.39	1,166	2.0%
Elburn silt loam, 0 to 2 percent slopes	B/D	0.34	1,083	1.9%
Wyanet silt loam, 2 to 5 percent slopes	C	0.4	1,050	1.8%
Urban land	<Null>	<Null>	1,016	1.8%
Orthents, loamy, undulating	C	0.38	933	1.6%
Sabina silt loam, 0 to 2 percent slopes	C/D	0.39	923	1.6%
Birkbeck silt loam, 2 to 5 percent slopes	C	0.39	911	1.6%
Sunbury silt loam, 0 to 2 percent slopes	C/D	0.41	732	1.3%
Xenia silt loam, Bloomington Ridged Plain, 2 to 5 percent slopes	C	0.4	467	0.8%
Blackberry silt loam, 2 to 5 percent slopes	C	0.38	462	0.8%
Pella silty clay loam, 0 to 2 percent slopes	B/D	0.33	356	0.6%
Senachwine silt loam, 5 to 10 percent slopes, eroded	C	0.39	297	0.5%
Wyanet silt loam, 5 to 10 percent slopes, eroded	C	0.39	294	0.5%
Peotone silty clay loam, 0 to 2 percent slopes	C/D	0.31	281	0.5%
Harpster silty clay loam, 0 to 2 percent slopes	B/D	0.37	273	0.5%
Penfield loam, 2 to 5 percent slopes	B	0.32	173	0.3%
Senachwine silt loam, 2 to 5 percent slopes	C	0.39	160	0.3%
Campton silt loam, 2 to 5 percent slopes	C	0.4	150	0.3%
Water	<Null>	<Null>	148	0.3%
Ambraw silty clay loam, 0 to 2 percent slopes, frequently flooded	B/D	0.28	132	0.2%
Russell silt loam, Bloomington Ridged Plain, 5 to 10 percent slopes, er	B	0.36	125	0.2%
Senachwine silt loam, 10 to 18 percent slopes, eroded	C	0.39	115	0.2%
Camden silt loam, 2 to 5 percent slopes	B	0.4	114	0.2%
Kendall silt loam, 0 to 2 percent slopes	B/D	0.43	108	0.2%
Senachwine silt loam, 18 to 25 percent slopes, eroded	C	0.39	93	0.2%
Odell silt loam, 0 to 2 percent slopes	C/D	0.42	86	0.2%
Landfills	<Null>	<Null>	81	0.1%
Penfield loam, 5 to 10 percent slopes, eroded	B	0.3	71	0.1%
Martinsville loam, 5 to 10 percent slopes, eroded	B	0.32	61	0.1%
Onarga sandy loam, 2 to 5 percent slopes	A	0.22	47	0.1%
Millbrook silt loam, 0 to 2 percent slopes	C/D	0.32	45	0.1%
Pits, gravel	<Null>	<Null>	28	0.0%
La Hogue loam, 0 to 2 percent slopes	B/D	0.26	22	0.0%
Elliott silty clay loam, 2 to 4 percent slopes, eroded	C/D	0.43	18	0.0%
Martinsville silt loam, 2 to 5 percent slopes	B	0.35	9	0.0%
Thorp silt loam, 0 to 2 percent slopes	C/D	0.36	8	0.0%
Senachwine silt loam, 18 to 35 percent slopes	C	0.38	6	0.0%
Selma loam, 0 to 2 percent slopes	B/D	0.26	3	0.0%
Martinsville loam, 10 to 18 percent slopes, eroded	B	0.34	2	0.0%
			57,064	100.0%

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Appendix C

Water Quality Data

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StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Cobalt	Total	0.63	ug/l	J	0.38
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Silver	Total	0.66	ug/l	J	0.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Vanadium	Dissolved		ug/l	ND	1.78
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Strontium	Total	120	ug/l		0.21
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Vanadium	Total		ug/l	ND	1.29
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Zinc	Total		ug/l	ND	4.29
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Arsenic	Total		ug/l	ND	1.65
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Selenium	Total		ug/l	ND	2.62
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Phosphorus	Dissolved		mg/l	ND	0.0031
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chloride	Total	34.6	mg/l		0.02
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Sodium	Dissolved	12500	ug/l		48.5
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Lead	Total		ug/l	ND	3.81
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Zinc	Dissolved		ug/l	ND	2.39
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Selenium	Dissolved		ug/l	ND	2.62
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Strontium	Dissolved	120	ug/l		0.18
BPJC 08		6/26/2001	12:45	HARDNESS, CA,MG mg/l		343		C	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Barium	Total	53.4	ug/l		0.44
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Phenols	Total	2.63	ug/l	J	1.39
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Alkalinity, total		278	mg/l		3.49
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Organic carbon	Total	2.1	mg/l		0.17
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Potassium	Total	719	ug/l	J	40.3
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Lead	Dissolved		ug/l	ND	4.42
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Temperature, sample		3	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Arsenic	Dissolved		ug/l	ND	1.65
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Iron	Dissolved	4.72	ug/l	J	3.7
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Boron	Dissolved	56.1	ug/l	V	3.73
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Cadmium	Dissolved		ug/l	ND	0.31
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Calcium	Dissolved	62500	ug/l		5.38
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chromium	Dissolved		ug/l	ND	4.04
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Barium	Dissolved	51.9	ug/l		0.16
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Aluminum	Dissolved		ug/l	ND	17.7
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Manganese	Total	2.89	ug/l	J	0.18
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Magnesium	Dissolved	37300	ug/l		37.8

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Manganese	Dissolved	1.49	ug/l	J	0.09
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Nickel	Dissolved		ug/l	ND	0.55
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Potassium	Dissolved	714	ug/l	J	55.2
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Silver	Dissolved		ug/l	ND	0.6
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Cobalt	Dissolved		ug/l	ND	0.82
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Sodium	Total	13000	ug/l		22.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Iron	Total	45.3	ug/l	J	4.58
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Nickel	Total		ug/l	ND	0.66
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Copper	Dissolved		ug/l	ND	1.12
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Specific conductance		618	umho/cm		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Magnesium	Total	37400	ug/l		32.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Fluoride	Total	0.14	mg/l		0.003
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Dissolved oxygen (DO)		8.8	mg/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Dissolved oxygen saturati		89	%		
BPJC 08		6/26/2001	12:45	PH		8			
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Temperature, air		19	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Temperature, water		16	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Turbidity		2.68	NTU		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Pheophytin a	Total	1.23	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chlorophyll c	Total		ug/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chlorophyll a, uncorrecte	Total	1.58	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chlorophyll b	Total		ug/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chlorophyll a, corrected f	Total	0.79	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Boron	Total	54.3	ug/l		2.51
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Phosphorus	Total	0.015	mg/l		0.002
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Copper	Total		ug/l	ND	1.14
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Aluminum	Total	37.1	ug/l	J	10.6
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Beryllium	Total		ug/l	ND	0.12
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Cadmium	Total		ug/l	ND	0.34
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Calcium	Total	63300	ug/l		9.69
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Total suspended solids			mg/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Kjeldahl nitrogen	Total	0.27	mg/l	J	0.15
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Volatile suspended solids			mg/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Chromium	Total		ug/l	ND	3.05

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Ammonia-nitrogen	Total		mg/l	ND	0.03
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Inorganic nitrogen (nitrate	Total	3.59	mg/l		0.058
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Sulfate	Total	14.7	mg/l		0.02
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Specific conductance		674.4	umho/cm		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Inorganic nitrogen (nitrate	Total	0.178	mg/l		0.058
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Dissolved oxygen saturati		165.7	%		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Temperature, water		22.1	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Temperature, sample		2	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Dissolved oxygen (DO)		14.32	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Kjeldahl nitrogen	Total	0.2	mg/l	J	0.15
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Phosphorus	Total	0.093	mg/l		0.002
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Total suspended solids		5	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Volatile suspended solids			mg/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Ammonia-nitrogen	Total	0.03	mg/l	J	0.03
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Temperature, air		27	deg C		
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	Dissolved oxygen (DO)		8.65	mg/l		
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	Dissolved oxygen saturati		99.6	%		
BPJC 08		8/13/2001	9:20	PH		7.7			
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	Temperature, air		27	deg C		
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	Temperature, water		22	deg C		
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	Specific conductance		747.3	umho/cm		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Total suspended solids		11	mg/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Sulfate	Total	11.2	mg/l		0.02
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Nickel	Dissolved		ug/l	ND	0.55
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Volatile suspended solids			mg/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Strontium	Dissolved	116	ug/l		0.18
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Arsenic	Dissolved		ug/l	ND	1.65
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Silver	Total		ug/l	ND	0.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Lead	Dissolved		ug/l	ND	4.42
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Magnesium	Dissolved	33000	ug/l		37.8
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Manganese	Dissolved	8.33	ug/l		0.09
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Potassium	Dissolved	1130	ug/l	J	55.2
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Silver	Dissolved		ug/l	ND	0.6
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Sodium	Dissolved	12100	ug/l		48.5

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Fluoride	Total	0.15	mg/l		0.003
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Vanadium	Dissolved		ug/l	ND	1.78
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Zinc	Dissolved		ug/l	ND	2.39
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Cobalt	Dissolved		ug/l	ND	0.82
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Calcium	Total	85800	ug/l		9.69
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Phenols	Total	5.2	ug/l	J	1.39
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chloride	Total	84.1	mg/l		0.02
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Kjeldahl nitrogen	Total	0.36	mg/l	J	0.15
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Lead	Total		ug/l	ND	3.81
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Beryllium	Total		ug/l	ND	0.12
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Copper	Dissolved		ug/l	ND	1.12
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Barium	Total	64.1	ug/l		0.44
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Strontium	Total	128	ug/l		0.21
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Selenium	Dissolved		ug/l	ND	2.62
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chromium	Total		ug/l	ND	3.05
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Cobalt	Total	0.69	ug/l	J	0.38
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Copper	Total		ug/l	ND	1.14
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Ammonia-nitrogen	Total		mg/l	ND	0.05
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Iron	Total	216	ug/l		4.58
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Phosphorus	Total	0.074	mg/l		0.002
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Magnesium	Total	34600	ug/l		32.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Manganese	Total	17.5	ug/l		0.18
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Nickel	Total		ug/l	ND	0.66
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Potassium	Total	1140	ug/l	J	40.3
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Sodium	Total	12400	ug/l		22.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Boron	Total	52.2	ug/l		2.51
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Aluminum	Total	116	ug/l		10.6
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Alkalinity, total		216	mg/l		2.4
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Organic carbon	Total	2.08	mg/l		0.17
BPJC 08		8/13/2001	9:20	HARDNESS, CA,MG mg/l		291		C	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Turbidity		12	NTU		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Cadmium	Total		ug/l	ND	0.34
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Temperature, air		23	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Dissolved oxygen (DO)		5.8	mg/l		

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Dissolved oxygen saturati		69	%		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Temperature, water		23.8	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Iron	Dissolved	5.53	ug/l	J	3.7
BPJCA-UC-D1		9/17/2001	10:00	PH		7.3			
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Temperature, sample		3	deg C		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chlorophyll a, uncorrecte	Total	1.78	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Pheophytin a	Total	1.81	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chlorophyll b	Total		ug/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chlorophyll a, corrected fo	Total	0.64	ug/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chlorophyll c	Total		ug/l	ND	
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Boron	Dissolved	53	ug/l		3.73
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Specific conductance		686	umho/cm		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Vanadium	Total		ug/l	ND	1.29
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Cadmium	Dissolved		ug/l	ND	0.31
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Chromium	Dissolved		ug/l	ND	4.04
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Barium	Dissolved	61.3	ug/l		0.16
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Aluminum	Dissolved		ug/l	ND	17.7
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Phosphorus	Dissolved	0.057	mg/l		0.0031
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Inorganic nitrogen (nitrate	Total	5.86	mg/l		0.058
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Selenium	Total		ug/l	ND	2.62
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Arsenic	Total		ug/l	ND	1.65
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Zinc	Total		ug/l	ND	4.29
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Calcium	Dissolved	81700	ug/l		5.38
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Silver	Dissolved		ug/l	ND	0.6
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Cadmium	Dissolved		ug/l	ND	0.31
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Nickel	Dissolved	0.71	ug/l	J	0.55
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Lead	Dissolved		ug/l	ND	4.42
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Iron	Dissolved	8.12	ug/l	J	3.7
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Vanadium	Total	10.2	ug/l		1.29
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Cobalt	Dissolved		ug/l	ND	0.82
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Arsenic	Total		ug/l	ND	1.65
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Barium	Dissolved	47.5	ug/l		0.16

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Aluminum	Dissolved		ug/l	ND	17.7
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Phosphorus	Dissolved	0.113	mg/l		0.0031
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Inorganic nitrogen (nitrate	Total	4.35	mg/l		0.058
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Ammonia-nitrogen	Total		mg/l	ND	0.05
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Alkalinity, total		283	mg/l		2.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Vanadium	Dissolved		ug/l	ND	1.78
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Copper	Dissolved		ug/l	ND	1.12
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Selenium	Total		ug/l	ND	2.62
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Selenium	Dissolved		ug/l	ND	2.62
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Cadmium	Total		ug/l	ND	0.34
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Lead	Total		ug/l	ND	3.81
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Nickel	Total		ug/l	ND	0.66
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Volatile suspended solids			mg/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Copper	Total		ug/l	ND	1.14
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Iron	Total	96.5	ug/l		4.58
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chromium	Total		ug/l	ND	3.05
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Arsenic	Dissolved		ug/l	ND	1.65
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Barium	Total	55.2	ug/l		0.44
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Sulfate	Total	13.9	mg/l		0.02
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Fluoride	Total	0.17	mg/l		0.003
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chloride	Total	36	mg/l		0.02
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Organic carbon	Total	2.73	mg/l		0.17
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Cobalt	Total	1.45	ug/l	J	0.38
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chromium	Dissolved		ug/l	ND	4.04
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Phenols	Total	3.79	ug/l	J	1.39
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Manganese	Total	24.9	ug/l		0.18
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Sodium	Dissolved	51000	ug/l		48.5
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Potassium	Dissolved	3620	ug/l		55.2
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Magnesium	Dissolved	36700	ug/l		37.8
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Boron	Dissolved	249	ug/l		3.73
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Zinc	Total		ug/l	ND	4.29
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Strontium	Total	113	ug/l		0.21
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Strontium	Dissolved	249	ug/l		0.18
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Potassium	Total	1780	ug/l		40.3

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Manganese	Dissolved	47.3	ug/l		0.09
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Magnesium	Total	29400	ug/l		32.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Calcium	Total	73000	ug/l		9.69
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Silver	Total	0.79	ug/l	J	0.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Boron	Total	62	ug/l		2.51
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Zinc	Dissolved	13.6	ug/l		2.39
BPJCA-UC-D1		9/17/2001	10:00	HARDNESS, CA,MG mg/l		234		C	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Total suspended solids		5	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Sodium	Total	18100	ug/l		22.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chlorophyll b	Total		ug/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Kjeldahl nitrogen	Total	0.4	mg/l	J	0.15
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Phosphorus	Total	0.091	mg/l		0.002
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Beryllium	Total		ug/l	ND	0.12
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Aluminum	Total	48.2	ug/l	J	10.6
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Calcium	Dissolved	92800	ug/l		5.38
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Pheophytin a	Total		ug/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Dissolved oxygen (DO)		6.7	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chlorophyll a, corrected fo	Total	1.03	ug/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chlorophyll c	Total		ug/l	ND	
BPJC 08		10/3/2001	12:00	PH		8.8			
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Turbidity		4.2	NTU		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Temperature, water		20.4	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Temperature, air		23	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Dissolved oxygen saturati		74.8	%		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Specific conductance		677	umho/cm		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Temperature, sample		3	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Chlorophyll a, uncorrecte	Total	1	ug/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	Specific conductance		701.9	umho/cm		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	Dissolved oxygen (DO)		11.98	mg/l		
BPJCA-UC-D1		6/12/2006	10:00	pH		7.58			
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	Temperature, air		26	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	Dissolved oxygen saturati		145.4	%		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	Temperature, water		24.8	deg C		
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Volatile suspended solids			mg/l	ND	

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Inorganic nitrogen (nitrate	Total	0.183	mg/l		0.058
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Temperature, sample		1	deg C		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Phosphorus	Total	0.032	mg/l		0.002
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Kjeldahl nitrogen	Total	0.77	mg/l		0.15
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Ammonia-nitrogen	Total	0.18	mg/l		0.05
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Total suspended solids		18	mg/l		
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Kjeldahl nitrogen	Total	0.49	mg/l	J	0.15
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Total suspended solids		14	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Phosphorus	Total	0.01	mg/l		0.0031
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Ammonia-nitrogen	Total		mg/l	ND	0.05
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Inorganic nitrogen (nitrate	Total	14.7	mg/l		0.058
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Volatile suspended solids			mg/l	ND	
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Temperature, sample		0	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Iron	Total	73.3	ug/l		4.58
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chloride	Total	28.1	mg/l		0.02
BPJC 08		10/3/2001	12:00	HARDNESS, CA,MG mg/l		273		C	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Strontium	Total	117	ug/l		0.21
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Sodium	Total	8560	ug/l		22.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Silver	Total	0.73	ug/l	J	0.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Potassium	Total	212	ug/l	J	40.3
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Nickel	Total		ug/l	ND	0.66
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Manganese	Total	3.26	ug/l	J	0.18
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Phenols	Total	3.36	ug/l	J	1.39
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Barium	Total	54.5	ug/l		0.44
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Fluoride	Total	0.16	mg/l		0.003
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Beryllium	Total	0.31	ug/l	J	0.12
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Copper	Total		ug/l	ND	1.14
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Cobalt	Total	0.78	ug/l	J	0.38
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chromium	Total		ug/l	ND	3.05
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Magnesium	Total	32700	ug/l		32.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Organic carbon	Total	1.53	mg/l		0.17
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Calcium	Total	80000	ug/l		9.69
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Turbidity		4	NTU		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chlorophyll a, uncorrecte	Total	1.26	ug/l		

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chlorophyll c	Total		ug/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Pheophytin a	Total	0.68	ug/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Silver	Dissolved		ug/l	ND	0.6
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Boron	Total	34.3	ug/l		2.51
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Aluminum	Total	68.1	ug/l		10.6
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Alkalinity, total		253	mg/l		2.4
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chlorophyll b	Total		ug/l	ND	
BPJC-02	SALINE BRANCH DRAINAGE DITCH	6/2/2016	12:15	Phosphorus	Total	0.064	mg/l		0.0031
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Sulfate	Total	11.3	mg/l		0.02
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Ammonia-nitrogen	Total		mg/l	ND	0.05
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Kjeldahl nitrogen	Total	0.21	mg/l	J	0.15
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Volatile suspended solids			mg/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Total suspended solids			mg/l	ND	
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Inorganic nitrogen (nitrate	Total	11.8	mg/l		0.058
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Magnesium	Dissolved	30900	ug/l		37.8
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Zinc	Dissolved		ug/l	ND	2.39
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Iron	Dissolved	4.17	ug/l	J	3.7
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Vanadium	Dissolved		ug/l	ND	1.78
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Sodium	Dissolved	7730	ug/l		48.5
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Lead	Dissolved		ug/l	ND	4.42
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Potassium	Dissolved	231	ug/l	J	55.2
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Zinc	Total	16	ug/l		4.29
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Manganese	Dissolved	1.67	ug/l	J	0.09
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Arsenic	Total		ug/l	ND	1.65
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Dissolved oxygen saturati		95.4	%		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Dissolved oxygen (DO)		9	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Temperature, water		17.9	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Temperature, air		26	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Specific conductance		644.7	umho/cm		
BPJC-08		6/21/2006	10:00	pH		7.94			
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chlorophyll a, corrected fo	Total	0.79	ug/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Nickel	Dissolved		ug/l	ND	0.55
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Cadmium	Dissolved		ug/l	ND	0.31
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Lead	Total		ug/l	ND	3.81

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Strontium	Dissolved	108	ug/l		0.18
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Vanadium	Total		ug/l	ND	1.29
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Selenium	Dissolved		ug/l	ND	2.62
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Cobalt	Dissolved		ug/l	ND	0.82
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Barium	Dissolved	50.4	ug/l		0.16
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Calcium	Dissolved	76000	ug/l		5.38
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Cadmium	Total		ug/l	ND	0.34
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Boron	Dissolved	33	ug/l		3.73
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Copper	Dissolved		ug/l	ND	1.12
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Aluminum	Dissolved		ug/l	ND	17.7
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Phosphorus	Dissolved	0.004	mg/l	J	0.0031
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Arsenic	Dissolved		ug/l	ND	1.65
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Selenium	Total		ug/l	ND	2.62
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Chromium	Dissolved		ug/l	ND	4.04
BPJC-08		5/19/2011	11:45	Dissolved oxygen (DO)		17.6	mg/l		
BPJC-08		5/19/2011	11:45	Dissolved oxygen saturati		174.4	%		
BPJC-08		8/3/2006	11:00	pH		8.02			
BPJC-08		5/19/2011	11:45	Specific conductance		573	umho/cm		
BPJC-08		5/19/2011	11:45	Temperature, air		26	deg C		
BPJC-08		5/19/2011	11:45	Temperature, water		14.38	deg C		
BPJC-08		5/19/2011	11:45	Turbidity		12	NTU		
BPJC-08		8/9/2011	8:00	Dissolved oxygen (DO)		2.74	mg/l		
BPJC-08		8/9/2011	8:00	Dissolved oxygen saturati		32.4	%		
BPJC-UC-A2		8/15/2006	12:45	pH		7.53			
BPJC-08		8/9/2011	8:00	Specific conductance		507	umho/cm		
BPJC-08		8/9/2011	8:00	Temperature, air		22	deg C		
BPJC-08		8/9/2011	8:00	Temperature, water		22.53	deg C		
BPJC-08		10/3/2011	11:50	Dissolved oxygen (DO)		11.5	mg/l		
BPJC-08		10/3/2011	11:50	Dissolved oxygen saturati		109.3	%		
BPJC-UC-A1		8/16/2006	15:15	pH		7.7			
BPJC-08		10/3/2011	11:50	Specific conductance		555	umho/cm		
BPJC-08		10/3/2011	11:50	Temperature, air		22	deg C		

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08		10/3/2011	11:50	Temperature, water		12.49	deg C		
BPJC-08		10/3/2011	11:50	Turbidity		7	NTU		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Alkalinity, total		190	mg/l		1.46
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Aluminum	Dissolved		ug/l	ND	2.78
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Aluminum	Total	80.9	ug/l		2.78
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Ammonia-nitrogen	Total		mg/l	ND	0.02
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Arsenic	Dissolved	5.45	ug/l	V	0.94
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Arsenic	Total	4.91	ug/l	V	0.94
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Barium	Dissolved	42	ug/l		0.13
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Barium	Total	42.3	ug/l		0.13
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Beryllium	Total		ug/l	ND	0.08
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Boron	Dissolved		ug/l	ND	2.73
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Boron	Total	13.2	ug/l	V	2.73
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Cadmium	Dissolved		ug/l	ND	0.18
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Cadmium	Total	0.49	ug/l	J	0.18
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Calcium	Dissolved	68800	ug/l		4.76
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Calcium	Total	68800	ug/l		4.76
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chloride	Total	27.3	mg/l		0.29
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chromium	Dissolved	1.42	ug/l	J	0.24
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chromium	Total	0.92	ug/l	J	0.24
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Cobalt	Dissolved	1.41	ug/l	J	0.22
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Cobalt	Total	1.77	ug/l	J	0.22
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Copper	Dissolved	3.97	ug/l	J	0.79
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Copper	Total	5.97	ug/l		0.79
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Cyanide	Total		mg/l	ND	0.002
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Fluoride	Total	0.26	mg/l		0.02
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Hardness, Ca + Mg	Total	310000	ug/l	C	
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Inorganic nitrogen (nitrate	Total	11	mg/l		0.018
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Iron	Dissolved		ug/l	ND	3.06
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Iron	Total	197	ug/l		3.06
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Kjeldahl nitrogen	Total	0.357	mg/l	J	0.098
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Lead	Dissolved	5.97	ug/l	V	0.67
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Lead	Total	7.31	ug/l	V	0.67

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Magnesium	Dissolved	27800	ug/l	J6	4.69
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Magnesium	Total	27700	ug/l	J6	4.69
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Manganese	Dissolved	3.68	ug/l	J	0.05
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Manganese	Total	10.4	ug/l		0.05
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Nickel	Dissolved		ug/l	ND	0.41
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Nickel	Total		ug/l	ND	0.41
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Organic carbon	Total	1.66	mg/l		0.02
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Phenols	Total		ug/l	ND	1.53
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Phosphorus	Dissolved	0.003	mg/l	J	0.002
BPJC-02	SALINE BRANCH DRAINAGE DITCH	8/11/2016	7:45	Phosphorus	Total	0.082	mg/l		0.0031
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Potassium	Dissolved		ug/l	ND	8.13
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Potassium	Total	81.6	ug/l	J	8.13
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Silver	Dissolved	0.39	ug/l	J	0.38
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Silver	Total		ug/l	ND	0.38
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Sodium	Dissolved	7630	ug/l		231
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Sodium	Total	7690	ug/l		231
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Strontium	Dissolved	90.7	ug/l		0.38
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Strontium	Total	92.2	ug/l		0.38
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Sulfate	Total	2.71	mg/l	J	1.63
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Temperature, sample		3	deg C		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Total suspended solids		10	mg/l		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Vanadium	Dissolved		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Vanadium	Total		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Volatile suspended solids		6	mg/l		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Zinc	Dissolved		ug/l	ND	0.35
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Zinc	Total		ug/l	ND	0.35
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chlorophyll a, corrected fo	Total	8.41	ug/l		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chlorophyll a, uncorrected	Total	9.2	ug/l		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chlorophyll b	Total	0.04	ug/l	J	
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Chlorophyll c	Total	1.25	ug/l		
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Pheophytin a	Total	0.8	ug/l		
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Ammonia-nitrogen	Total	0.1	mg/l		0.02
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Inorganic nitrogen (nitrate	Total	13.5	mg/l		0.018
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Kjeldahl nitrogen	Total	0.419	mg/l	J	0.098

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Phosphorus	Total	0.122	mg/l		0.0031
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Total suspended solids		44	mg/l		
BPJC-08	SALINE BRANCH	6/1/2011	8:17	Volatile suspended solids		11	mg/l		
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Ammonia-nitrogen	Total		mg/l	ND	0.02
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Inorganic nitrogen (nitrate	Total		mg/l	ND	0.018
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Kjeldahl nitrogen	Total	0.782	mg/l		0.098
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Phosphorus	Total	0.068	mg/l		0.0031
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Temperature, sample		2	deg C		
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Total suspended solids		11	mg/l	Q	
BPJC-08	SALINE BRANCH	8/4/2011	11:08	Volatile suspended solids		6	mg/l	Q	
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Alkalinity, total		165	mg/l		1.46
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Aluminum	Dissolved	115	ug/l		2.78
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Aluminum	Total	145	ug/l		2.78
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Ammonia-nitrogen	Total		mg/l	ND	0.02
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Arsenic	Dissolved	9.03	ug/l		0.94
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Arsenic	Total	10.6	ug/l		0.94
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Barium	Dissolved	38.1	ug/l		0.13
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Barium	Total	40.2	ug/l		0.13
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Beryllium	Dissolved		ug/l	ND	0.08
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Beryllium	Total		ug/l	ND	0.08
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Boron	Dissolved	77.6	ug/l		2.73
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Boron	Total	81.8	ug/l		2.73
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Cadmium	Dissolved		ug/l	ND	0.18
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Cadmium	Total		ug/l	ND	0.18
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Calcium	Dissolved	27400	ug/l		4.76
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Calcium	Total	29600	ug/l		4.76
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chloride	Total	52.4	mg/l		0.29
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chromium	Dissolved	1.75	ug/l	J	0.24
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chromium	Total		ug/l	ND	0.24
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Cobalt	Dissolved		ug/l	ND	0.22
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Cobalt	Total		ug/l	ND	0.22
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Copper	Dissolved		ug/l	ND	0.79
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Copper	Total		ug/l	ND	0.79

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Cyanide	Total	0.003	mg/l	J	0.002
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Fluoride	Total	0.27	mg/l		0.02
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Hardness, Ca + Mg	Total	380000	ug/l	C	
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Inorganic nitrogen (nitrate	Total		mg/l	ND	0.018
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Iron	Dissolved	44.8	ug/l	J	3.06
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Iron	Total	256	ug/l		3.06
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Kjeldahl nitrogen	Total	0.676	mg/l		0.098
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Lead	Dissolved		ug/l	ND,V	0.67
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Lead	Total	5.94	ug/l	V	0.67
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Magnesium	Dissolved	29200	ug/l		4.69
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Magnesium	Total	31400	ug/l		4.69
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Manganese	Dissolved	146	ug/l		0.05
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Manganese	Total	166	ug/l		0.05
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Nickel	Dissolved	0.98	ug/l	J	0.41
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Nickel	Total	1.88	ug/l	J	0.41
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Organic carbon	Total	8.5	mg/l		0.02
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Phenols	Total		ug/l	ND	1.53
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Phosphorus	Dissolved	0.068	mg/l		0.002
BPJC-08	SALINE BRANCH DRAINAGE DITCH	10/5/2016	13:40	Phosphorus	Total	0.039	mg/l		0.0031
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Potassium	Dissolved	2690	ug/l	J7	8.13
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Potassium	Total	3010	ug/l	J7	8.13
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Silver	Dissolved	1.64	ug/l	J	0.38
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Silver	Total	1.84	ug/l	J	0.38
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Sodium	Dissolved	20600	ug/l		231
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Sodium	Total	22700	ug/l		231
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Strontium	Dissolved	121	ug/l		0.38
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Strontium	Total	134	ug/l		0.38
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Sulfate	Total	24.3	mg/l		1.63
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Temperature, sample		3	deg C		
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Total suspended solids		8	mg/l		
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Vanadium	Dissolved		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Vanadium	Total		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Volatile suspended solids		7	mg/l		
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Zinc	Dissolved	5.81	ug/l	V	0.35

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Zinc	Total	77.8	ug/l		0.35
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chlorophyll a, corrected fo	Total	2.14	ug/l		
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chlorophyll a, uncorrected	Total	3.17	ug/l		
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chlorophyll b	Total	0.3	ug/l	J	
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Chlorophyll c	Total	0.13	ug/l	J	
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Pheophytin a	Total	1.6	ug/l		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Alkalinity, total		115	mg/l		1.46
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Aluminum	Dissolved		ug/l	ND	2.78
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Aluminum	Total	217	ug/l		2.78
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Ammonia-nitrogen	Total	1.59	mg/l		0.02
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Arsenic	Dissolved	2.21	ug/l		0.94
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Arsenic	Total	2.13	ug/l		0.94
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Barium	Dissolved	24.8	ug/l		0.13
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Barium	Total	26	ug/l		0.13
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Beryllium	Dissolved	0.59	ug/l	J	0.08
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Beryllium	Total	0.56	ug/l	J	0.08
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Boron	Dissolved	58.5	ug/l		2.73
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Boron	Total	61	ug/l		2.73
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Cadmium	Dissolved	0.27	ug/l	J	0.18
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Cadmium	Total	0.2	ug/l	J	0.18
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Calcium	Dissolved	20700	ug/l		4.76
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Calcium	Total	21100	ug/l		4.76
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chloride	Total	97.6	mg/l		0.29
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chromium	Dissolved	0.49	ug/l	J	0.24
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chromium	Total		ug/l	ND	0.24
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Cobalt	Dissolved	0.44	ug/l	J	0.22
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Cobalt	Total	0.91	ug/l	J	0.22
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Copper	Dissolved	0.83	ug/l	J	0.79
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Copper	Total	1.43	ug/l	J	0.79
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Cyanide	Total		mg/l	ND	0.002
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Fluoride	Total	0.21	mg/l		0.02
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Hardness, Ca + Mg	Total	330000	ug/l	C	
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Inorganic nitrogen (nitrate	Total	0.057	mg/l	J,J3	0.018
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Iron	Dissolved	27.2	ug/l	J	3.06

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Iron	Total	295	ug/l		3.06
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Kjeldahl nitrogen	Total	0.585	mg/l		0.098
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Lead	Dissolved		ug/l	ND	0.67
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Lead	Total		ug/l	ND	0.67
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Magnesium	Dissolved	27200	ug/l		4.69
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Magnesium	Total	27200	ug/l		4.69
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Manganese	Dissolved	7.87	ug/l		0.05
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Manganese	Total	16.1	ug/l		0.05
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Nickel	Dissolved	2.91	ug/l	J	0.41
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Nickel	Total	1.67	ug/l	J	0.41
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Organic carbon	Total	6.7	mg/l		0.02
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Phenols	Total		ug/l	ND	1.53
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Phosphorus	Dissolved	0.022	mg/l		0.002
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Phosphorus	Total	0.008	mg/l		0.0031
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Potassium	Dissolved	1780	ug/l		8.13
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Potassium	Total	1920	ug/l		8.13
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Silver	Dissolved		ug/l	J6,ND	0.38
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Silver	Total		ug/l	J6,ND	0.38
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Sodium	Dissolved	48400	ug/l		231
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Sodium	Total	49700	ug/l		231
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Strontium	Dissolved	82.8	ug/l		0.38
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Strontium	Total	85	ug/l		0.38
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Sulfate	Total	26.5	mg/l		1.63
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Temperature, sample		3	deg C		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Total suspended solids		8	mg/l		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Vanadium	Dissolved		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Vanadium	Total		ug/l	ND	0.19
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Volatile suspended solids		6	mg/l		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Zinc	Dissolved	2.22	ug/l	J	0.35
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Zinc	Total	4.88	ug/l	J	0.35
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chlorophyll a, corrected fo	Total	0.56	ug/l		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chlorophyll a, uncorrected	Total	0.95	ug/l		
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chlorophyll b	Total		ug/l	ND	0.5
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Chlorophyll c	Total	0.21	ug/l	J	

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Pheophytin a	Total	0.61	ug/l		
BPJC 08		8/13/2001	9:20	SOLIDS, FIXED		409			
BPJC 08		8/13/2001	9:20	ALKALINITY, CARBONATE /	Total	237			
BPJC 08		8/13/2001	9:20	FLUORIDES		0.3			
BPJC 08		8/13/2001	9:20	CHLORIDE,Total mg/l	Total	90.5			
BPJC 08		8/13/2001	9:20	SULFATE		47.9			
BPJC 08		8/13/2001	9:20	NITROGEN, NITRITE (NO2)		0.01		K	
BPJC 08		8/13/2001	9:20	NITROGEN, AMMONIA (N	Total	0.15			
BPJC 08		8/13/2001	9:20	PHOSPHORUS AS P,Dissol	Dissolved	0.17			
BPJC 08		8/13/2001	9:20	PHOSPHORUS AS P,Total r	Total	0.33			
BPJC 08		8/13/2001	9:20	CARBON, TOTAL ORGANIC		13			
BPJC 08		8/13/2001	9:20	SOLIDS, FIXED,Total mg/l	Total	25			
BPJC 08		8/13/2001	9:20	SOLIDS, FIXED,Volatile mg	Volatile	8			
BPJC 08		8/13/2001	9:20	ARSENIC,Total	Total	17			
BPJC 08		8/13/2001	9:20	LEAD,Dissolved ug/l	Dissolved	5		K	
BPJC 08		8/13/2001	9:20	LEAD,Total ug/l	Total	5		K	
BPJC 08		8/13/2001	9:20	CALCIUM,Dissolved mg/l	Dissolved	46			
BPJC 08		8/13/2001	9:20	MAGNESIUM,Dissolved m	Dissolved	37			
BPJC 08		8/13/2001	9:20	SODIUM,Dissolved mg/l	Dissolved	37			
BPJC 08		8/13/2001	9:20	POTASSIUM,Dissolved mg	Dissolved	5.1			
BPJC 08		8/13/2001	9:20	ALUMINUM,Dissolved ug/	Dissolved	100		K	
BPJC 08		8/13/2001	9:20	BARIUM,Dissolved ug/l	Dissolved	41			
BPJC 08		8/13/2001	9:20	BORON,Dissolved ug/l	Dissolved	70			
BPJC 08		8/13/2001	9:20	BERYLLIUM,Dissolved ug/l	Dissolved	1		K	
BPJC 08		8/13/2001	9:20	CADMIUM,Dissolved ug/l	Dissolved	3		K	
BPJC 08		8/13/2001	9:20	CHROMIUM,Dissolved ug/	Dissolved	5		K	
BPJC 08		8/13/2001	9:20	COPPER,Dissolved ug/l	Dissolved	10		K	
BPJC 08		8/13/2001	9:20	COBALT,Dissolved ug/l	Dissolved	10		K	
BPJC 08		8/13/2001	9:20	IRON,Dissolved ug/l	Dissolved	50		K	
BPJC 08		8/13/2001	9:20	MANGANESE,Dissolved ug	Dissolved	680			
BPJC 08		8/13/2001	9:20	NICKEL,Dissolved ug/l	Dissolved	25		K	
BPJC 08		8/13/2001	9:20	SILVER,Dissolved ug/l	Dissolved	3		K	
BPJC 08		8/13/2001	9:20	STRONTIUM,Dissolved ug/	Dissolved	130			
BPJC 08		8/13/2001	9:20	VANADIUM,Dissolved ug/	Dissolved	5		K	

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC 08		8/13/2001	9:20	ZINC,Dissolved ug/l	Dissolved	100		K	
BPJC 08		8/13/2001	9:20	CALCIUM,Total mg/l	Total	51			
BPJC 08		8/13/2001	9:20	MAGNESIUM,Total mg/l	Total	40			
BPJC 08		8/13/2001	9:20	SODIUM,Total mg/l	Total	41			
BPJC 08		8/13/2001	9:20	POTASSIUM,Total mg/l	Total	6.4			
BPJC 08		8/13/2001	9:20	ALUMINUM,Total ug/l	Total	130			
BPJC 08		8/13/2001	9:20	BARIUM,Total ug/l	Total	50			
BPJC 08		8/13/2001	9:20	BORON,Total ug/l	Total	77			
BPJC 08		8/13/2001	9:20	BERYLLIUM,Total ug/l	Total	1		K	
BPJC 08		8/13/2001	9:20	CADMIUM,Total ug/l	Total	3		K	
BPJC 08		8/13/2001	9:20	CHROMIUM,Total ug/l	Total	5		K	
BPJC 08		8/13/2001	9:20	COPPER,Total ug/l	Total	10		K	
BPJC 08		8/13/2001	9:20	COBALT,Total ug/l	Total	10		K	
BPJC 08		8/13/2001	9:20	IRON,Total ug/l	Total	690			
BPJC 08		8/13/2001	9:20	MANGANESE,Total ug/l	Total	810			
BPJC 08		8/13/2001	9:20	NICKEL,Total ug/l	Total	25		K	
BPJC 08		8/13/2001	9:20	SILVER,Total ug/l	Total	3		K	
BPJC 08		8/13/2001	9:20	STRONTIUM,Total ug/l	Total	150			
BPJC 08		8/13/2001	9:20	VANADIUM,Total ug/l	Total	5		K	
BPJC 08		8/13/2001	9:20	ZINC,Total ug/l	Total	100		K	
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Hardness, Ca + Mg	Total	310000	ug/l	C	
BPJC 08		8/13/2001	9:20	TEMPERATURE, AIR deg C		25			
BPJC 08		8/13/2001	9:20	TEMPERATURE, WATER de		23.9			
BPJC 08		8/13/2001	9:20	DISSOLVED OXYGEN (DO)		4.9			
BPJC 08		8/13/2001	9:20	CONDUCTANCE, SPECIFIC		688			
BPJCA-UC-D1		8/17/2006	11:50	pH		7.6			
BPJC 08		8/13/2001	9:20	TURBIDITY NTU		19.5			
BPJC 08		8/13/2001	9:20	CHLOROPHYLL A, CORREC		19.9			
BPJC 08		8/13/2001	9:20	CHLOROPHYLL A, UNCORF	Fixed	30.8			
BPJC 08		8/13/2001	9:20	CHLOROPHYLL-B		2.63			
BPJC 08		8/13/2001	9:20	CHLOROPHYLL-C		2.29			
BPJC 08		8/13/2001	9:20	PHEOPHYTIN-A		17			
BPJC 08		8/13/2001	9:20	DEPTH ft		1			
BPJC 08		8/13/2001	9:20	CHLOROPHYLL (A+B+C),Fil	Filterable	210			

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1		9/17/2001	10:00	CHLOROPHYLL A, CORREC		1.43			
BPJCA-UC-D1		9/17/2001	10:00	CHLOROPHYLL A, UNCORF	Fixed	1.43			
BPJCA-UC-D1		9/17/2001	10:00	CHLOROPHYLL-B		1		K	
BPJCA-UC-D1		9/17/2001	10:00	CHLOROPHYLL-C		1		K	
BPJCA-UC-D1		9/17/2001	10:00	PHEOPHYTIN-A		1		K	
BPJCA-UC-D1		9/17/2001	10:00	DEPTH ft		1			
BPJCA-UC-D1		9/17/2001	10:00	CHLOROPHYLL (A+B+C),Fil	Filterable	455			
BPJCA-UC-D1		9/17/2001	10:00	SOLIDS, FIXED		380			
BPJCA-UC-D1		9/17/2001	10:00	ALKALINITY, CARBONATE ,	Total	213			
BPJCA-UC-D1		9/17/2001	10:00	FLUORIDES		0.64			
BPJCA-UC-D1		9/17/2001	10:00	CHLORIDE,Total mg/l	Total	57			
BPJCA-UC-D1		9/17/2001	10:00	SULFATE		58.4			
BPJCA-UC-D1		9/17/2001	10:00	NITROGEN, NITRITE (NO2)		0.8			
BPJCA-UC-D1		9/17/2001	10:00	NITROGEN, AMMONIA (N	Total	0.78			
BPJCA-UC-D1		9/17/2001	10:00	PHOSPHORUS AS P,Dissol	Dissolved	0.11			
BPJCA-UC-D1		9/17/2001	10:00	PHOSPHORUS AS P,Total r	Total	0.19			
BPJCA-UC-D1		9/17/2001	10:00	CARBON, TOTAL ORGANIC		3.1			
BPJCA-UC-D1		9/17/2001	10:00	SOLIDS, FIXED,Total mg/l	Total	6			
BPJCA-UC-D1		9/17/2001	10:00	SOLIDS, FIXED,Volatile mg	Volatile	5			
BPJCA-UC-D1		9/17/2001	10:00	ARSENIC,Total	Total	0.6			
BPJCA-UC-D1		9/17/2001	10:00	LEAD,Dissolved ug/l	Dissolved	5		K	
BPJCA-UC-D1		9/17/2001	10:00	LEAD,Total ug/l	Total	5		K	
BPJCA-UC-D1		9/17/2001	10:00	CALCIUM,Dissolved mg/l	Dissolved	56			
BPJCA-UC-D1		9/17/2001	10:00	MAGNESIUM,Dissolved m	Dissolved	24			
BPJCA-UC-D1		9/17/2001	10:00	SODIUM,Dissolved mg/l	Dissolved	46			
BPJCA-UC-D1		9/17/2001	10:00	POTASSIUM,Dissolved mg	Dissolved	3.3			
BPJCA-UC-D1		9/17/2001	10:00	ALUMINUM,Dissolved ug/	Dissolved	100		K	
BPJCA-UC-D1		9/17/2001	10:00	BARIUM,Dissolved ug/l	Dissolved	66			
BPJCA-UC-D1		9/17/2001	10:00	BORON,Dissolved ug/l	Dissolved	380			
BPJCA-UC-D1		9/17/2001	10:00	BERYLLIUM,Dissolved ug/l	Dissolved	1		K	
BPJCA-UC-D1		9/17/2001	10:00	CADMIUM,Dissolved ug/l	Dissolved	3		K	
BPJCA-UC-D1		9/17/2001	10:00	CHROMIUM,Dissolved ug/	Dissolved	5		K	
BPJCA-UC-D1		9/17/2001	10:00	COPPER,Dissolved ug/l	Dissolved	10		K	
BPJCA-UC-D1		9/17/2001	10:00	COBALT,Dissolved ug/l	Dissolved	10		K	

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1		9/17/2001	10:00	IRON,Dissolved ug/l	Dissolved	50		K	
BPJCA-UC-D1		9/17/2001	10:00	MANGANESE,Dissolved ug	Dissolved	51			
BPJCA-UC-D1		9/17/2001	10:00	NICKEL,Dissolved ug/l	Dissolved	25		K	
BPJCA-UC-D1		9/17/2001	10:00	SILVER,Dissolved ug/l	Dissolved	3		K	
BPJCA-UC-D1		9/17/2001	10:00	STRONTIUM,Dissolved ug/	Dissolved	190			
BPJCA-UC-D1		9/17/2001	10:00	VANADIUM,Dissolved ug/	Dissolved	8			
BPJCA-UC-D1		9/17/2001	10:00	ZINC,Dissolved ug/l	Dissolved	100		K	
BPJCA-UC-D1		9/17/2001	10:00	CALCIUM,Total mg/l	Total	56			
BPJCA-UC-D1		9/17/2001	10:00	MAGNESIUM,Total mg/l	Total	23			
BPJCA-UC-D1		9/17/2001	10:00	SODIUM,Total mg/l	Total	45			
BPJCA-UC-D1		9/17/2001	10:00	POTASSIUM,Total mg/l	Total	3.3			
BPJCA-UC-D1		9/17/2001	10:00	ALUMINUM,Total ug/l	Total	100		K	
BPJCA-UC-D1		9/17/2001	10:00	BARIUM,Total ug/l	Total	66			
BPJCA-UC-D1		9/17/2001	10:00	BORON,Total ug/l	Total	380			
BPJCA-UC-D1		9/17/2001	10:00	BERYLLIUM,Total ug/l	Total	1		K	
BPJCA-UC-D1		9/17/2001	10:00	CADMIUM,Total ug/l	Total	3		K	
BPJCA-UC-D1		9/17/2001	10:00	CHROMIUM,Total ug/l	Total	5		K	
BPJCA-UC-D1		9/17/2001	10:00	COPPER,Total ug/l	Total	10		K	
BPJCA-UC-D1		9/17/2001	10:00	COBALT,Total ug/l	Total	10		K	
BPJCA-UC-D1		9/17/2001	10:00	IRON,Total ug/l	Total	250			
BPJCA-UC-D1		9/17/2001	10:00	MANGANESE,Total ug/l	Total	52			
BPJCA-UC-D1		9/17/2001	10:00	NICKEL,Total ug/l	Total	25		K	
BPJCA-UC-D1		9/17/2001	10:00	SILVER,Total ug/l	Total	3		K	
BPJCA-UC-D1		9/17/2001	10:00	STRONTIUM,Total ug/l	Total	180			
BPJCA-UC-D1		9/17/2001	10:00	VANADIUM,Total ug/l	Total	9			
BPJCA-UC-D1		9/17/2001	10:00	ZINC,Total ug/l	Total	100		K	
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Hardness, Ca + Mg	Total	280000	ug/l	C	
BPJCA-UC-D1		9/17/2001	10:00	TEMPERATURE, AIR deg C		20			
BPJCA-UC-D1		9/17/2001	10:00	TEMPERATURE, WATER de		16.9			
BPJCA-UC-D1		9/17/2001	10:00	DISSOLVED OXYGEN (DO)		6.4			
BPJCA-UC-D1		9/17/2001	10:00	CONDUCTANCE, SPECIFIC		627			
BPJC-UC-A2		8/17/2006	13:30	pH		7.76			
BPJCA-UC-D1		9/17/2001	10:00	TURBIDITY NTU		2.9			
BPJC 08		6/26/2001	12:45	CHLOROPHYLL A, CORREC		0.72			

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC 08		6/26/2001	12:45	CHLOROPHYLL A, UNCORF	Fixed	1.94			
BPJC 08		6/26/2001	12:45	CHLOROPHYLL-B		0.8			
BPJC 08		6/26/2001	12:45	CHLOROPHYLL-C		0.71			
BPJC 08		6/26/2001	12:45	PHEOPHYTIN-A		2.06			
BPJC 08		6/26/2001	12:45	DEPTH ft		1			
BPJC 08		6/26/2001	12:45	CHLOROPHYLL (A+B+C),Fil	Filterable	670			
BPJC 08		6/26/2001	12:45	SOLIDS, FIXED		400			
BPJC 08		6/26/2001	12:45	FLUORIDES		0.22			
BPJC 08		6/26/2001	12:45	NITROGEN, NITRITE (NO2)		10			
BPJC 08		6/26/2001	12:45	NITROGEN, AMMONIA (N	Total	0.01		K	
BPJC 08		6/26/2001	12:45	PHOSPHORUS AS P,Dissol	Dissolved	0.01		K	
BPJC 08		6/26/2001	12:45	PHOSPHORUS AS P,Total r	Total	0.01			
BPJC 08		6/26/2001	12:45	CARBON, TOTAL ORGANIC		2.4			
BPJC 08		6/26/2001	12:45	SOLIDS, FIXED,Total mg/l	Total	3			
BPJC 08		6/26/2001	12:45	SOLIDS, FIXED,Volatile mg	Volatile	1			
BPJC 08		6/26/2001	12:45	ARSENIC,Total	Total	0.72			
BPJC 08		6/26/2001	12:45	LEAD,Total ug/l	Total	5		K	
BPJC 08		6/26/2001	12:45	CALCIUM,Dissolved mg/l	Dissolved	79			
BPJC 08		6/26/2001	12:45	MAGNESIUM,Dissolved m	Dissolved	36			
BPJC 08		6/26/2001	12:45	SODIUM,Dissolved mg/l	Dissolved	8.8			
BPJC 08		6/26/2001	12:45	POTASSIUM,Dissolved mg	Dissolved	1.4		K	
BPJC 08		6/26/2001	12:45	ALUMINUM,Dissolved ug/	Dissolved	100		K	
BPJC 08		6/26/2001	12:45	BARIUM,Dissolved ug/l	Dissolved	51			
BPJC 08		6/26/2001	12:45	BORON,Dissolved ug/l	Dissolved	37			
BPJC 08		6/26/2001	12:45	BERYLLIUM,Dissolved ug/l	Dissolved	1		K	
BPJC 08		6/26/2001	12:45	CADMIUM,Dissolved ug/l	Dissolved	3		K	
BPJC 08		6/26/2001	12:45	CHROMIUM,Dissolved ug/	Dissolved	5		K	
BPJC 08		6/26/2001	12:45	COPPER,Dissolved ug/l	Dissolved	10		K	
BPJC 08		6/26/2001	12:45	COBALT,Dissolved ug/l	Dissolved	10		K	
BPJC 08		6/26/2001	12:45	IRON,Dissolved ug/l	Dissolved	50		K	
BPJC 08		6/26/2001	12:45	MANGANESE,Dissolved ug	Dissolved	15		K	
BPJC 08		6/26/2001	12:45	NICKEL,Dissolved ug/l	Dissolved	25		K	
BPJC 08		6/26/2001	12:45	SILVER,Dissolved ug/l	Dissolved	3		K	
BPJC 08		6/26/2001	12:45	STRONTIUM,Dissolved ug/	Dissolved	110			

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC 08		6/26/2001	12:45	VANADIUM,Dissolved ug/	Dissolved	5		K	
BPJC 08		6/26/2001	12:45	ZINC,Dissolved ug/l	Dissolved	100		K	
BPJC 08		6/26/2001	12:45	CALCIUM,Total mg/l	Total	79			
BPJC 08		6/26/2001	12:45	MAGNESIUM,Total mg/l	Total	36			
BPJC 08		6/26/2001	12:45	SODIUM,Total mg/l	Total	8.8			
BPJC 08		6/26/2001	12:45	POTASSIUM,Total mg/l	Total	1.4		K	
BPJC 08		6/26/2001	12:45	ALUMINUM,Total ug/l	Total	100		K	
BPJC 08		6/26/2001	12:45	BARIUM,Total ug/l	Total	52			
BPJC 08		6/26/2001	12:45	BORON,Total ug/l	Total	35			
BPJC 08		6/26/2001	12:45	BERYLLIUM,Total ug/l	Total	1		K	
BPJC 08		6/26/2001	12:45	CADMIUM,Total ug/l	Total	3		K	
BPJC 08		6/26/2001	12:45	CHROMIUM,Total ug/l	Total	5		K	
BPJC 08		6/26/2001	12:45	COPPER,Total ug/l	Total	10		K	
BPJC 08		6/26/2001	12:45	COBALT,Total ug/l	Total	10		K	
BPJC 08		6/26/2001	12:45	IRON,Total ug/l	Total	50		K	
BPJC 08		6/26/2001	12:45	MANGANESE,Total ug/l	Total	15		K	
BPJC 08		6/26/2001	12:45	NICKEL,Total ug/l	Total	25		K	
BPJC 08		6/26/2001	12:45	SILVER,Total ug/l	Total	3		K	
BPJC 08		6/26/2001	12:45	STRONTIUM,Total ug/l	Total	110			
BPJC 08		6/26/2001	12:45	VANADIUM,Total ug/l	Total	5		K	
BPJC 08		6/26/2001	12:45	ZINC,Total ug/l	Total	100		K	
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Hardness, Ca + Mg	Total	260000	ug/l	C	
BPJC 08		6/26/2001	12:45	TEMPERATURE, AIR deg C		31			
BPJC 08		6/26/2001	12:45	TEMPERATURE, WATER de		23.3			
BPJC 08		6/26/2001	12:45	DISSOLVED OXYGEN (DO)		10.7			
BPJC 08		6/26/2001	12:45	CONDUCTANCE, SPECIFIC		683			
BPJCA-UC-D1		8/21/2006	14:30	pH		7.79			
BPJC 08		6/26/2001	12:45	TURBIDITY FTU		2.8			
BPJC 08		10/3/2001	12:00	SOLIDS, FIXED		373			
BPJC 08		10/3/2001	12:00	ALKALINITY, CARBONATE A	Total	168			
BPJC 08		10/3/2001	12:00	FLUORIDES		0.28			
BPJC 08		10/3/2001	12:00	CHLORIDE,Total mg/l	Total	83.5			
BPJC 08		10/3/2001	12:00	SULFATE		10.5			
BPJC 08		10/3/2001	12:00	NITROGEN, NITRITE (NO2)		0.01		K	

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC 08		10/3/2001	12:00	NITROGEN, AMMONIA (N	Total	0.16			
BPJC 08		10/3/2001	12:00	PHOSPHORUS AS P,Dissol	Dissolved	0.11			
BPJC 08		10/3/2001	12:00	PHOSPHORUS AS P,Total r	Total	0.32			
BPJC 08		10/3/2001	12:00	CARBON, TOTAL ORGANIC		15			
BPJC 08		10/3/2001	12:00	SOLIDS, FIXED,Total mg/l	Total	192			
BPJC 08		10/3/2001	12:00	SOLIDS, FIXED,Volatile mg	Volatile	30			
BPJC 08		10/3/2001	12:00	ARSENIC,Total	Total	6.3			
BPJC 08		10/3/2001	12:00	LEAD,Dissolved ug/l	Dissolved	5		K	
BPJC 08		10/3/2001	12:00	LEAD,Total ug/l	Total	5		K	
BPJC 08		10/3/2001	12:00	CALCIUM,Dissolved mg/l	Dissolved	33			
BPJC 08		10/3/2001	12:00	MAGNESIUM,Dissolved m	Dissolved	32			
BPJC 08		10/3/2001	12:00	SODIUM,Dissolved mg/l	Dissolved	50			
BPJC 08		10/3/2001	12:00	POTASSIUM,Dissolved mg	Dissolved	4			
BPJC 08		10/3/2001	12:00	ALUMINUM,Dissolved ug/	Dissolved	100		K	
BPJC 08		10/3/2001	12:00	BARIUM,Dissolved ug/l	Dissolved	25			
BPJC 08		10/3/2001	12:00	BORON,Dissolved ug/l	Dissolved	94			
BPJC 08		10/3/2001	12:00	BERYLLIUM,Dissolved ug/l	Dissolved	1		K	
BPJC 08		10/3/2001	12:00	CADMIUM,Dissolved ug/l	Dissolved	3		K	
BPJC 08		10/3/2001	12:00	CHROMIUM,Dissolved ug/	Dissolved	5		K	
BPJC 08		10/3/2001	12:00	COPPER,Dissolved ug/l	Dissolved	10		K	
BPJC 08		10/3/2001	12:00	COBALT,Dissolved ug/l	Dissolved	10		K	
BPJC 08		10/3/2001	12:00	IRON,Dissolved ug/l	Dissolved	50		K	
BPJC 08		10/3/2001	12:00	MANGANESE,Dissolved ug	Dissolved	64			
BPJC 08		10/3/2001	12:00	NICKEL,Dissolved ug/l	Dissolved	25		K	
BPJC 08		10/3/2001	12:00	SILVER,Dissolved ug/l	Dissolved	3		K	
BPJC 08		10/3/2001	12:00	STRONTIUM,Dissolved ug/	Dissolved	120			
BPJC 08		10/3/2001	12:00	VANADIUM,Dissolved ug/	Dissolved	5		K	
BPJC 08		10/3/2001	12:00	ZINC,Dissolved ug/l	Dissolved	100		K	
BPJC 08		10/3/2001	12:00	CALCIUM,Total mg/l	Total	51			
BPJC 08		10/3/2001	12:00	MAGNESIUM,Total mg/l	Total	36			
BPJC 08		10/3/2001	12:00	SODIUM,Total mg/l	Total	52			
BPJC 08		10/3/2001	12:00	POTASSIUM,Total mg/l	Total	4.4			
BPJC 08		10/3/2001	12:00	ALUMINUM,Total ug/l	Total	1200			
BPJC 08		10/3/2001	12:00	BARIUM,Total ug/l	Total	54			

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC 08		10/3/2001	12:00	BORON,Total ug/l	Total	100			
BPJC 08		10/3/2001	12:00	BERYLLIUM,Total ug/l	Total	1		K	
BPJC 08		10/3/2001	12:00	CADMIUM,Total ug/l	Total	3		K	
BPJC 08		10/3/2001	12:00	CHROMIUM,Total ug/l	Total	5		K	
BPJC 08		10/3/2001	12:00	COPPER,Total ug/l	Total	10		K	
BPJC 08		10/3/2001	12:00	COBALT,Total ug/l	Total	10		K	
BPJC 08		10/3/2001	12:00	IRON,Total ug/l	Total	2700			
BPJC 08		10/3/2001	12:00	MANGANESE,Total ug/l	Total	550			
BPJC 08		10/3/2001	12:00	NICKEL,Total ug/l	Total	25		K	
BPJC 08		10/3/2001	12:00	SILVER,Total ug/l	Total	3		K	
BPJC 08		10/3/2001	12:00	STRONTIUM,Total ug/l	Total	140			
BPJC 08		10/3/2001	12:00	VANADIUM,Total ug/l	Total	5		K	
BPJC 08		10/3/2001	12:00	ZINC,Total ug/l	Total	100		K	
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Hardness, Ca + Mg	Total	330000	ug/l	C	
BPJC 08		10/3/2001	12:00	TEMPERATURE, AIR deg C		27			
BPJC 08		10/3/2001	12:00	TEMPERATURE, WATER de		19.2			
BPJC 08		10/3/2001	12:00	DISSOLVED OXYGEN (DO)		11.5			
BPJC 08		10/3/2001	12:00	CONDUCTANCE, SPECIFIC		618			
BPJCA-02		9/7/2006	9:30	pH		7.16			
BPJC 08		10/3/2001	12:00	TURBIDITY NTU		70			
BPJC-08		6/21/2006	10:00	Dissolved oxygen (DO)		7.63	mg/l		
BPJCA-03		9/7/2006	11:00	pH		7			
BPJC-08		6/21/2006	10:00	Specific conductance		666	umho/cm		
BPJC-08		6/21/2006	10:00	Temperature, air		28	deg C		
BPJC-08		6/21/2006	10:00	Temperature, water		24.2	deg C		
BPJC-08		6/21/2006	10:00	Turbidity		2.8	NTU		
BPJC-08		8/3/2006	11:00	Dissolved oxygen (DO)		12	mg/l		
BPJC-08		10/5/2006	11:00	pH		8.28			
BPJC-08		8/3/2006	11:00	Specific conductance		606	umho/cm		
BPJC-08		8/3/2006	11:00	Temperature, air		28	deg C		
BPJC-08		8/3/2006	11:00	Temperature, water		27.2	deg C		
BPJC-08		8/3/2006	11:00	Turbidity		7.5	NTU		
BPJC-08		10/5/2006	11:00	Dissolved oxygen (DO)		12.4	mg/l		
BPJCA-UC-D1		10/11/2006	9:00	pH		7.39			

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08		10/5/2006	11:00	Specific conductance		714	umho/cm		
BPJC-08		10/5/2006	11:00	Temperature, air		12	deg C		
BPJC-08		10/5/2006	11:00	Temperature, water		16.4	deg C		
BPJC-08		10/5/2006	11:00	Turbidity		6.9	NTU		
BPJCA-02		9/7/2006	9:30	Dissolved oxygen (DO)		6.5	mg/l		
BPJC-08		5/19/2011	11:45	pH		8.5	none		
BPJCA-02		9/7/2006	9:30	Specific conductance		832	umho/cm		
BPJCA-02		9/7/2006	9:30	Temperature, air		20	deg C		
BPJCA-02		9/7/2006	9:30	Temperature, water		19.9	deg C		
BPJCA-03		9/7/2006	11:00	Dissolved oxygen (DO)		5.5	mg/l		
BPJC-08		8/9/2011	8:00	pH		6.88	none		
BPJCA-03		9/7/2006	11:00	Specific conductance		805	umho/cm		
BPJCA-03		9/7/2006	11:00	Temperature, air		27	deg C		
BPJCA-03		9/7/2006	11:00	Temperature, water		19.5	deg C		
BPJCA-03		9/7/2006	11:00	Turbidity		4.42	NTU		
BPJCA-UC-D1		6/12/2006	10:00	Dissolved oxygen (DO)		3.97	mg/l		
BPJC-08		10/3/2011	11:50	pH		9.43	none		
BPJCA-UC-D1		6/12/2006	10:00	Specific conductance		812	umho/cm		
BPJCA-UC-D1		6/12/2006	10:00	Temperature, air		16	deg C		
BPJCA-UC-D1		6/12/2006	10:00	Temperature, water		16	deg C		
BPJCA-UC-D1		6/12/2006	10:00	Turbidity		2.5	NTU		
BPJCA-UC-D1		8/17/2006	11:50	Dissolved oxygen (DO)		7.27	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	pH		7.8	None		
BPJCA-UC-D1		8/17/2006	11:50	Specific conductance		872	umho/cm		
BPJCA-UC-D1		8/17/2006	11:50	Temperature, air		26	deg C		
BPJCA-UC-D1		8/17/2006	11:50	Temperature, water		21.38	deg C		
BPJCA-UC-D1		8/21/2006	14:30	Dissolved oxygen (DO)		8.36	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/14/2016	13:40	pH		8.2	None		
BPJCA-UC-D1		8/21/2006	14:30	Specific conductance		876	umho/cm		
BPJCA-UC-D1		8/21/2006	14:30	Temperature, air		25	deg C		
BPJCA-UC-D1		8/21/2006	14:30	Temperature, water		21.7	deg C		
BPJCA-UC-D1		8/21/2006	14:30	Turbidity		7.6	NTU		
BPJCA-UC-D1		10/11/2006	9:00	Dissolved oxygen (DO)		5.82	mg/l		
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	pH		7.8	None		

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1		10/11/2006	9:00	Specific conductance		273	umho/cm		
BPJCA-UC-D1		10/11/2006	9:00	Temperature, air		12	deg C		
BPJCA-UC-D1		10/11/2006	9:00	Temperature, water		17	deg C		
BPJCA-UC-D1		10/11/2006	9:00	Turbidity		22	NTU		
BPJC-UC-A1		8/16/2006	15:15	Dissolved oxygen (DO)		6.19	mg/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	pH		7.8	None		
BPJC-UC-A1		8/16/2006	15:15	Specific conductance		731	umho/cm		
BPJC-UC-A1		8/16/2006	15:15	Temperature, air		27	deg C		
BPJC-UC-A1		8/16/2006	15:15	Temperature, water		22.29	deg C		
BPJC-UC-A2		8/15/2006	12:45	Dissolved oxygen (DO)		5.56	mg/l		
BPJCA-02	BONEYARD CREEK	9/15/2016	12:50	pH		8.3	None		
BPJC-UC-A2		8/15/2006	12:45	Specific conductance		641	umho/cm		
BPJC-UC-A2		8/15/2006	12:45	Temperature, air		27	deg C		
BPJC-UC-A2		8/15/2006	12:45	Temperature, water		22.22	deg C		
BPJC-UC-A2		8/17/2006	13:30	Dissolved oxygen (DO)		5.67	mg/l		
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	pH		7.7	None		
BPJC-UC-A2		8/17/2006	13:30	Specific conductance		618	umho/cm		
BPJC-UC-A2		8/17/2006	13:30	Temperature, air		27	deg C		
BPJC-UC-A2		8/17/2006	13:30	Temperature, water		22.32	deg C		
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Alkalinity, total		250	mg/l		1.04
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Carbon, organic	Total	3.15	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chloride	Total	79	mg/l		0.955
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Cyanide	Weak Acid Diss		mg/l	ND	0.005
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Fluorides	Total	0.49	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nitrogen, ammonia as N	Total	0.186	mg/l		0.024
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nitrogen, Kjeldahl	Total	0.4	mg/l	J	0.213
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nitrogen, Nitrate (NO3) as	Total	0.952	mg/l		0.002
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nitrogen, Nitrite (NO2) + N	Total	1	mg/l		0.003
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nitrogen, Nitrite (NO2) as	Total	0.05	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Phenols	Total	37	ug/l	J	34
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Phosphorus as P	Dissolved	0.24	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Phosphorus as P	Total	0.15	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Solids, suspended, volatile		2	mg/l	J	3.92
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Solids, Total Suspended (T			mg/l	ND	3.92

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Sulfate	Total	50	mg/l		0.548
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Temperature, sample		0.2	deg C		
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Alkalinity, total		244	mg/l		1.04
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Carbon, organic	Total	2.39	mg/l		0.006
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chloride	Total	33.2	mg/l		0.191
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Cyanide	Weak Acid Diss		mg/l	ND	0.005
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Fluorides	Total	0.106	mg/l		0.006
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nitrogen, ammonia as N	Total		mg/l	ND	0.024
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nitrogen, Nitrate (NO3) as	Total	7.47	mg/l		0.019
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nitrogen, Nitrite (NO2) + N	Total	7.69	mg/l		0.032
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nitrogen, Nitrite (NO2) as	Total	0.288	mg/l		0.001
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Phenols	Total	42	ug/l	J	34
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Phosphorus as P	Dissolved	0.187	mg/l		0.001
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Phosphorus as P	Total	0.188	mg/l		0.001
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Solids, suspended, volatile			mg/l	ND	3.92
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Solids, Total Suspended (T			mg/l	ND	3.92
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Sulfate	Total	21.6	mg/l		0.11
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Temperature, sample		4.8	deg C		
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Alkalinity, total		253	mg/l		1.04
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Carbon, organic	Total	4.17	mg/l		0.006
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chloride	Total	28.7	mg/l		0.096
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Cyanide	Weak Acid Diss		mg/l	ND	0.005
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Fluorides	Total	0.211	mg/l		0.006
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nitrogen, ammonia as N	Total		mg/l	ND	0.024
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nitrogen, Kjeldahl	Total	0.28	mg/l	J	0.213
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nitrogen, Nitrate (NO3) as	Total	5.07	mg/l		0.009
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nitrogen, Nitrite (NO2) + N	Total	5.14	mg/l		0.016
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nitrogen, Nitrite (NO2) as	Total	0.094	mg/l		0.001
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Phenols	Total		ug/l	ND	34
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Phosphorus as P	Dissolved	0.106	mg/l		0.001
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Phosphorus as P	Total	0.119	mg/l		0.001
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Solids, suspended, volatile		3	mg/l	J	3.92
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Solids, Total Suspended (T			mg/l	ND	3.92

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Sulfate	Total	17.4	mg/l		0.055
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Temperature, sample		3.4	deg C		
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Carbon, organic	Total	3.69	mg/l		0.006
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Chloride	Total	58.5	mg/l		0.955
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Nitrogen, ammonia as N	Total		mg/l	ND	0.024
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Nitrogen, Nitrate (NO3) as	Total	0.998	mg/l		0.002
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Nitrogen, Nitrite (NO2) + N	Total	0.998	mg/l		0.003
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Nitrogen, Nitrite (NO2) as	Total		mg/l	ND	0.001
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Phosphorus as P	Total	0.119	mg/l		0.001
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Solids, suspended, volatile		1.5	mg/l	J	3.92
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Solids, Total Suspended (T		12	mg/l		3.92
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Sulfate	Total	30.2	mg/l		0.548
BPJC-UC-A2	SALINE BRANCH	8/15/2006	12:45	Temperature, sample		2.7	deg C		
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Carbon, organic	Total	2.65	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Chloride	Total	88	mg/l		0.191
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nitrogen, ammonia as N	Total		mg/l	ND	0.024
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nitrogen, Nitrate (NO3) as	Total		mg/l	ND	0.002
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nitrogen, Nitrite (NO2) + N	Total		mg/l	ND	0.003
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nitrogen, Nitrite (NO2) as	Total		mg/l	ND	0.001
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Phosphorus as P	Total	0.165	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Solids, suspended, volatile			mg/l	ND	3.92
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Solids, Total Suspended (T		5.5	mg/l		3.92
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Sulfate	Total	46.5	mg/l		0.11
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Temperature, sample		2.6	deg C		
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Carbon, organic	Total	3.25	mg/l		0.006
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Chloride	Total	6.76	mg/l		0.019
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nitrogen, ammonia as N	Total		mg/l	ND	0.024
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nitrogen, Nitrate (NO3) as	Total		mg/l	ND	0.002
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nitrogen, Nitrite (NO2) + N	Total		mg/l	ND	0.003
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nitrogen, Nitrite (NO2) as	Total		mg/l	ND	0.001
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Phosphorus as P	Total	0.113	mg/l		0.001

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Solids, suspended, volatile			mg/l	ND	3.92
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Solids, Total Suspended (T			mg/l	ND	3.92
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Sulfate	Total	64.6	mg/l		0.11
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Temperature, sample		2.6	deg C		
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Alkalinity, total		262	mg/l		1.04
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Carbon, organic	Total	2.67	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chloride	Total	80.6	mg/l		0.955
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Cyanide	Weak Acid Diss		mg/l	ND	0.005
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Fluorides	Total	0.522	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nitrogen, ammonia as N	Total	0.247	mg/l		0.024
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nitrogen, Nitrate (NO3) as	Total	1.6	mg/l		0.002
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nitrogen, Nitrite (NO2) + N	Total	1.69	mg/l		0.003
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nitrogen, Nitrite (NO2) as	Total	0.086	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Phenols	Total		ug/l	ND	34
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Phosphorus as P	Dissolved	0.144	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Phosphorus as P	Total	0.197	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Solids, suspended, volatile			mg/l	ND	3.92
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Solids, Total Suspended (T			mg/l	ND	3.92
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Sulfate	Total	51.3	mg/l		0.548
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Temperature, sample		3.7	deg C		
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Alkalinity, total		310	mg/l		1.04
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Carbon, organic	Total	2.97	mg/l		0.006
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chloride	Total	38.2	mg/l		0.382
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Cyanide	Weak Acid Diss		mg/l	ND	0.005
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Fluorides	Total	0.209	mg/l		0.006
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nitrogen, ammonia as N	Total	0.096	mg/l	J	0.024
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nitrogen, Kjeldahl	Total		mg/l	ND	0.213
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nitrogen, Nitrate (NO3) as	Total	3.38	mg/l		0.009
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nitrogen, Nitrite (NO2) + N	Total	3.67	mg/l		0.016
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nitrogen, Nitrite (NO2) as	Total	0.041	mg/l	J	0.001
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Phenols	Total		ug/l	ND	34
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Phosphorus as P	Dissolved	0.0415	mg/l		0.001
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Phosphorus as P	Total	0.0742	mg/l		0.00102

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Solids, suspended, volatile		0.5	mg/l	J	3.92
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Solids, Total Suspended (T		23	mg/l		3.92
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Sulfate	Total	19.6	mg/l		0.055
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Temperature, sample		5.5	deg C		
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Alkalinity, total		84	mg/l		1.04
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Carbon, organic	Total	29.3	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chloride	Total	23.8	mg/l		0.191
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Cyanide	Weak Acid Diss	0.006	mg/l	J	0.005
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Fluorides	Total	0.566	mg/l		0.006
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nitrogen, ammonia as N	Total	0.432	mg/l		0.024
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nitrogen, Kjeldahl	Total	0.807	mg/l		0.213
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nitrogen, Nitrate (NO3) as	Total	1.17	mg/l		0.002
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nitrogen, Nitrite (NO2) + N	Total	1.25	mg/l		0.003
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nitrogen, Nitrite (NO2) as	Total	0.083	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Phenols	Total		ug/l	ND	34
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Phosphorus as P	Dissolved	0.668	mg/l		0.001
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Phosphorus as P	Total	0.765	mg/l		0.00102
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Solids, suspended, volatile		4.5	mg/l		3.92
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Solids, Total Suspended (T		18	mg/l		3.92
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Sulfate	Total	17.4	mg/l		0.11
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Temperature, sample		2.1	deg C		
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Aluminum	Dissolved	55	ug/l	J	20
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Aluminum	Total	48	ug/l	J	20
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Arsenic	Total	3.3	ug/l		0.18
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Barium	Dissolved	74	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Barium	Total	75	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Beryllium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Beryllium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Boron	Dissolved	390	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Boron	Total	390	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Cadmium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Cadmium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Calcium	Dissolved	75000	ug/l		18
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Calcium	Total	76000	ug/l		18

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chromium	Dissolved		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chromium	Total		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Cobalt	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Cobalt	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Copper	Dissolved	3.5	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Copper	Total	4.9	ug/l	J	3
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Hardness, Ca + Mg	Total	240000	ug/l	C	
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Iron	Dissolved	94	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Iron	Total	260	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Lead	Dissolved		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Lead	Total		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Magnesium	Dissolved	29000	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Magnesium	Total	30000	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Manganese	Dissolved	49	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Manganese	Total	52	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nickel	Dissolved		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Nickel	Total		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Potassium	Dissolved	3100	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Potassium	Total	3000	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Silver	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Silver	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Sodium	Dissolved	63000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Sodium	Total	61000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Strontium	Dissolved	220	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Strontium	Total	220	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Temperature, sample		4	deg C		
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Temperature, sample		4	deg C		
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Vanadium	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Vanadium	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Zinc	Dissolved	9.6	ug/l	J	2
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Zinc	Total	13	ug/l		2
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chlorophyll a, corrected f	Total	1.84	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chlorophyll a, uncorrecte	Total	2.05	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chlorophyll-b	Total		ug/l	ND	1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Chlorophyll-c	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	6/12/2006	10:00	Pheophytin-a	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Aluminum	Dissolved	130	ug/l		20
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Aluminum	Total	300	ug/l		20
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Arsenic	Total	0.97	ug/l	J	0.06
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Barium	Dissolved	61	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Barium	Total	92	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Beryllium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Beryllium	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Boron	Dissolved	47	ug/l	J	4
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Boron	Total	40	ug/l		4
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Cadmium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Cadmium	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Calcium	Dissolved	81000	ug/l		18
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Calcium	Total	100000	ug/l		18
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chromium	Dissolved		ug/l	ND	2
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chromium	Total	4.8	ug/l	J	2
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Cobalt	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Cobalt	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Copper	Dissolved	5.1	ug/l		3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Copper	Total	10	ug/l		3
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Hardness, Ca + Mg	Total	180000	ug/l	C	
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Iron	Dissolved		ug/l	ND	33
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Iron	Total	820	ug/l		33
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Lead	Dissolved		ug/l	ND	5
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Lead	Total		ug/l	ND	5
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Magnesium	Dissolved	36000	ug/l		9
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Magnesium	Total	37000	ug/l		9
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Manganese	Dissolved	2.8	ug/l	J	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Manganese	Total	100	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nickel	Dissolved		ug/l	ND	5
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Nickel	Total	8.9	ug/l		5
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Potassium	Dissolved		ug/l	ND	2000
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Potassium	Total		ug/l	ND	2000

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Silver	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Silver	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Sodium	Dissolved	9000	ug/l		370
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Sodium	Total	7600	ug/l		370
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Strontium	Dissolved	120	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Strontium	Total	140	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Vanadium	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Vanadium	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Zinc	Dissolved	8.4	ug/l	J	2
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Zinc	Total	6.1	ug/l	J	2
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chlorophyll a, corrected fo	Total	1.85	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chlorophyll a, uncorrected	Total	1.86	ug/l		1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chlorophyll-b	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Chlorophyll-c	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	6/21/2006	10:00	Pheophytin-a	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	BOD, carbonaceous	Total	3	mg/l		0.35
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Solids, suspended, volatile		2	mg/l	J,V,X	
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Solids, Total Suspended (T		6	mg/l	V,X	
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Temperature, sample		2	deg C		
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Chlorophyll a, corrected fo	Total	6.25	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Chlorophyll a, uncorrected	Total	7.32	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Chlorophyll-b	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Chlorophyll-c	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Pheophytin-a	Total	1.5	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	BOD, carbonaceous	Total		mg/l	ND	0.35
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Solids, suspended, volatile		3	mg/l	J,Q	
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Solids, Total Suspended (T		6	mg/l	Q	
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Temperature, sample		3	deg C		
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Chlorophyll a, corrected fo	Total	3.02	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Chlorophyll a, uncorrected	Total	3.31	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Chlorophyll-b	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Chlorophyll-c	Total		ug/l	ND	1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Pheophytin-a	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chlorophyll a, corrected fo	Total	1.07	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chlorophyll a, uncorrected	Total	1.11	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chlorophyll-b	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chlorophyll-c	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Pheophytin-a	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Aluminum	Dissolved	33	ug/l	J	20
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Aluminum	Total	70	ug/l	J	20
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Arsenic	Total	2.4	ug/l		0.06
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Barium	Dissolved	59	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Barium	Total	59	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Beryllium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Beryllium	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Boron	Dissolved	63	ug/l		4
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Boron	Total	64	ug/l		4
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Cadmium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Cadmium	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Calcium	Dissolved	79000	ug/l		18
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Calcium	Total	78000	ug/l		18
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chromium	Dissolved		ug/l	ND	2
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Chromium	Total		ug/l	ND	2
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Cobalt	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Cobalt	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Copper	Dissolved	3.4	ug/l	J	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Copper	Total	4.3	ug/l	J	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Hardness, Ca + Mg	Total	400000	ug/l	C	
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Iron	Dissolved		ug/l	ND	33
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Iron	Total	110	ug/l		33
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Lead	Dissolved		ug/l	ND	5
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Lead	Total		ug/l	ND	5
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Magnesium	Dissolved	32000	ug/l		9
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Magnesium	Total	32000	ug/l		9
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Manganese	Dissolved	16	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Manganese	Total	22	ug/l		1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nickel	Dissolved		ug/l	ND,z	5
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Nickel	Total		ug/l	ND,z	5
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Potassium	Dissolved		ug/l	ND	2000
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Potassium	Total		ug/l	ND	2000
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Silver	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Silver	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Sodium	Dissolved	9200	ug/l		370
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Sodium	Total	8800	ug/l		370
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Strontium	Dissolved	120	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Strontium	Total	120	ug/l		1
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Vanadium	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Vanadium	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Zinc	Dissolved	17	ug/l	V	2
BPJC-08	SALINE BRANCH	8/3/2006	11:00	Zinc	Total	16	ug/l		2
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Aluminum	Total	87	ug/l	J	37
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Barium	Total	75	ug/l		1.2
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Beryllium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	BOD, carbonaceous	Total	1	mg/l		0.35
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Boron	Total	470	ug/l		6.6
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Cadmium	Total		ug/l	ND	1.1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Calcium	Total	76000	ug/l		66
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Chromium	Total		ug/l	ND	4
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Cobalt	Total		ug/l	ND	3.4
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Copper	Total	5.2	ug/l	J	4.8
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Hardness, Ca + Mg	Total	98000	ug/l	C	
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Iron	Total	340	ug/l		20
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Lead	Total		ug/l	ND	2.4
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Magnesium	Total	29000	ug/l		65
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Manganese	Total	51	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Nickel	Total		ug/l	ND	3.1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Potassium	Total	3000	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Silver	Total		ug/l	ND	2.6

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Sodium	Total	70000	ug/l		380
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Strontium	Total	220	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Temperature, sample		14	deg C		
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Vanadium	Total		ug/l	ND	4.1
BPJCA-UC-D1	BONEYARD CREEK	8/16/2006	12:50	Zinc	Total	12	ug/l		10
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Aluminum	Total	43	ug/l	J	37
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Barium	Total	64	ug/l		1.2
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Beryllium	Total		ug/l	ND	1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	BOD, carbonaceous	Total	0.7	mg/l	J	0.35
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Boron	Total	260	ug/l		6.6
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Cadmium	Total		ug/l	ND	1.1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Calcium	Total	64000	ug/l		66
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Chromium	Total		ug/l	ND	4
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Cobalt	Total		ug/l	ND	3.4
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Copper	Total		ug/l	ND	4.8
BPJC-08	SALINE BRANCH	5/19/2011	11:45	Hardness, Ca, Mg		286000	ug/l	C	
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Iron	Total	190	ug/l		20
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Lead	Total		ug/l	ND	2.4
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Magnesium	Total	30000	ug/l		65
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Manganese	Total	47	ug/l		1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Nickel	Total		ug/l	ND	3.1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Potassium	Total	2700	ug/l		2000
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Silver	Total		ug/l	ND	2.6
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Sodium	Total	44000	ug/l		380
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Strontium	Total	170	ug/l		1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Temperature, sample		14	deg C		
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Vanadium	Total		ug/l	ND	4.1
BPJC-UC-A1	SALINE BRANCH	8/16/2006	13:30	Zinc	Total		ug/l	ND	10
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Aluminum	Total	160	ug/l		37
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Barium	Total	58	ug/l		1.2
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Beryllium	Total		ug/l	ND	1
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	BOD, carbonaceous	Total	1	mg/l		0.35
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Boron	Total	120	ug/l		6.6
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Cadmium	Total		ug/l	ND	1.1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Calcium	Total	54000	ug/l		66
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Chromium	Total		ug/l	ND	4
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Cobalt	Total		ug/l	ND	3.4
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Copper	Total		ug/l	ND	4.8
BPJC-08	SALINE BRANCH	8/9/2011	8:00	Hardness, Ca, Mg		203000	ug/l	C	
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Iron	Total	360	ug/l		20
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Lead	Total		ug/l	ND	2.4
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Magnesium	Total	30000	ug/l		65
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Manganese	Total	75	ug/l		1
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Nickel	Total		ug/l	ND	3.1
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Potassium	Total	2400	ug/l		2000
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Silver	Total		ug/l	ND	2.6
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Sodium	Total	28000	ug/l		380
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Strontium	Total	140	ug/l		1
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Temperature, sample		14	deg C		
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Vanadium	Total		ug/l	ND	4.1
BPJC-UC-A2	SALINE BRANCH	8/16/2006	13:40	Zinc	Total		ug/l	ND	10
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chlorophyll a, corrected fo	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chlorophyll a, uncorrected	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chlorophyll-b	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chlorophyll-c	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Pheophytin-a	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Aluminum	Dissolved		ug/l	ND	20
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Aluminum	Total	60	ug/l	J	20
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Arsenic	Total	1.9	ug/l		0.06
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Barium	Dissolved	77	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Barium	Total	81	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Beryllium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Beryllium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Boron	Dissolved	440	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Boron	Total	440	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Cadmium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Cadmium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Calcium	Dissolved	82000	ug/l		18

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Calcium	Total	81000	ug/l		18
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chromium	Dissolved		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Chromium	Total		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Cobalt	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Cobalt	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Copper	Dissolved	3.6	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Copper	Total	5.8	ug/l	J	3
BPJC-08	SALINE BRANCH	10/3/2011	11:50	Hardness, Ca, Mg		165000	ug/l	C	
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Iron	Dissolved	190	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Iron	Total	420	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Lead	Dissolved		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Lead	Total		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Magnesium	Dissolved	33000	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Magnesium	Total	31000	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Manganese	Dissolved	51	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Manganese	Total	54	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nickel	Dissolved		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Nickel	Total		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Potassium	Dissolved	3200	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Potassium	Total	3300	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Silver	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Silver	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Sodium	Dissolved	63000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Sodium	Total	68000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Strontium	Dissolved	230	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Strontium	Total	230	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Temperature, sample		4	deg C		
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Temperature, sample		4	deg C		
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Vanadium	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Vanadium	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Zinc	Dissolved	12	ug/l	V	2
BPJCA-UC-D1	BONEYARD CREEK	8/21/2006	14:30	Zinc	Total	8.4	ug/l	J	2
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Aluminum	Total	75	ug/l	J	20
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Arsenic	Total	1.4	ug/l		0.06

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Barium	Total	72	ug/l		1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Beryllium	Total		ug/l	ND	1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	BOD, carbonaceous	Total	3	mg/l		0.35
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Boron	Total	1000	ug/l		4
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Cadmium	Total		ug/l	ND	1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Calcium	Total	59000	ug/l		18
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Carbon, organic	Total	3	mg/l		0.1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Chromium	Total		ug/l	ND	2
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Cobalt	Total		ug/l	ND	3
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Copper	Total	4.6	ug/l	J	3
BPJC-08	SALINE BRANCH DRAINAGE DITCH	5/25/2016	9:00	Hardness, Ca, Mg		334000	ug/l	C	
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Iron	Total	130	ug/l		33
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Lead	Total	7.1	ug/l		5
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Magnesium	Total	24000	ug/l		9
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Manganese	Total	39	ug/l		1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Nickel	Total		ug/l	ND	5
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Potassium	Total	3700	ug/l		2000
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Silver	Total		ug/l	ND	3
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Sodium	Total	84000	ug/l		370
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Solids, suspended, volatile		4	mg/l		
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Solids, Total Suspended (T			mg/l	ND	
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Strontium	Total	210	ug/l		1
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Temperature, sample		4	deg C		
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Vanadium	Total	3.6	ug/l	J	3
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Zinc	Total	10	ug/l		2
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Aluminum	Total	110	ug/l	V	20
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Arsenic	Total	1.9	ug/l		0.06
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Barium	Total	72	ug/l		1
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Beryllium	Total		ug/l	ND	1
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	BOD, carbonaceous	Total	4	mg/l		0.35
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Boron	Total	520	ug/l		4
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Cadmium	Total		ug/l	ND	1
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Calcium	Total	44000	ug/l		18
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Carbon, organic	Total	3.3	mg/l		0.1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Chromium	Total		ug/l	ND	2
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Cobalt	Total		ug/l	ND	3
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Copper	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH DRAINAGE DITCH	8/23/2016	8:15	Hardness, Ca, Mg		304000	ug/l	C	
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Iron	Total	170	ug/l		33
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Lead	Total		ug/l	ND	5
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Magnesium	Total	18000	ug/l		9
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Manganese	Total	34	ug/l		1
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Nickel	Total		ug/l	ND	5
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Potassium	Total	3500	ug/l		2000
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Silver	Total		ug/l	ND	3
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Sodium	Total	110000	ug/l		370
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Solids, suspended, volatile			mg/l	ND	
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Solids, Total Suspended (T		7	mg/l		
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Strontium	Total	190	ug/l		1
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Temperature, sample		4	deg C		
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Vanadium	Total		ug/l	ND	3
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Zinc	Total	8.7	ug/l	J	2
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	BOD, carbonaceous	Total	0.7	mg/l	J	0.35
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Solids, suspended, volatile		1	mg/l	J	
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Solids, Total Suspended (T		7	mg/l		
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Temperature, sample		6	deg C		
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Chlorophyll a, corrected fo	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Chlorophyll a, uncorrected	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Chlorophyll-b	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Chlorophyll-c	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Pheophytin-a	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Aluminum	Dissolved		ug/l	ND	20
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Aluminum	Total	310	ug/l		20
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Arsenic	Total	1.4	ug/l		0.06
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Barium	Dissolved	59	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Barium	Total	68	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Beryllium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Beryllium	Total		ug/l	ND	1

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Boron	Dissolved	48	ug/l	J	4
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Boron	Total	54	ug/l		4
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Cadmium	Dissolved		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Cadmium	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Calcium	Dissolved	83000	ug/l		18
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Calcium	Total	92000	ug/l		18
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chromium	Dissolved		ug/l	ND	2
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chromium	Total		ug/l	ND	2
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Cobalt	Dissolved	3.1	ug/l	J	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Cobalt	Total	4.6	ug/l	J	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Copper	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Copper	Total		ug/l	ND	3
BPJC-12	SALINE BRANCH DRAINAGE DITCH	8/30/2016	7:30	Hardness, Ca, Mg		357000	ug/l	C	
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Iron	Dissolved		ug/l	ND	33
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Iron	Total	510	ug/l		33
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Lead	Dissolved		ug/l	ND	5
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Lead	Total		ug/l	ND	5
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Magnesium	Dissolved	38000	ug/l		9
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Magnesium	Total	40000	ug/l		9
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Manganese	Dissolved	13	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Manganese	Total	54	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nickel	Dissolved		ug/l	ND	5
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Nickel	Total		ug/l	ND	5
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Potassium	Dissolved		ug/l	ND	2000
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Potassium	Total		ug/l	ND	2000
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Silver	Dissolved		ug/l	ND	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Silver	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Sodium	Dissolved	14000	ug/l		370
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Sodium	Total	15000	ug/l		370
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Strontium	Dissolved	140	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Strontium	Total	150	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Temperature, sample		6	deg C		
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Vanadium	Dissolved		ug/l	ND	3

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Vanadium	Total		ug/l	ND	3
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Zinc	Dissolved	2.1	ug/l	J	2
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Zinc	Total	3.2	ug/l	J	2
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Aluminum	Dissolved	44	ug/l	J	20
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Aluminum	Total	280	ug/l		20
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Arsenic	Total	1.5	ug/l		0.06
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Barium	Dissolved	31	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Barium	Total	34	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Beryllium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Beryllium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Boron	Dissolved	140	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Boron	Total	140	ug/l		4
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Cadmium	Dissolved		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Cadmium	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Calcium	Dissolved	25000	ug/l		18
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Calcium	Total	26000	ug/l		18
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chromium	Dissolved		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chromium	Total		ug/l	ND	2
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Cobalt	Dissolved	3.1	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Cobalt	Total	4.8	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Copper	Dissolved	41	ug/l		3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Copper	Total	52	ug/l		3
BPJC-12	SALINE BRANCH DRAINAGE DITCH	10/11/2016	10:00	Hardness, Ca, Mg		312000	ug/l	C	
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Iron	Dissolved	150	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Iron	Total	630	ug/l		33
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Lead	Dissolved	33	ug/l		5
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Lead	Total	11	ug/l		5
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Magnesium	Dissolved	7400	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Magnesium	Total	7800	ug/l		9
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Manganese	Dissolved	100	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Manganese	Total	130	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nickel	Dissolved	8.8	ug/l		5
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Nickel	Total		ug/l	ND	5
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Potassium	Dissolved	7100	ug/l		2000

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Potassium	Total	7200	ug/l		2000
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Silver	Dissolved		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Silver	Total		ug/l	ND	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Sodium	Dissolved	18000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Sodium	Total	18000	ug/l		370
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Strontium	Dissolved	74	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Strontium	Total	77	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Temperature, sample		6	deg C		
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Temperature, sample		6	deg C		
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Vanadium	Dissolved	4	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Vanadium	Total	4.1	ug/l	J	3
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Zinc	Dissolved	51	ug/l		2
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Zinc	Total	67	ug/l		2
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chlorophyll a, corrected f	Total	7.06	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chlorophyll a, uncorrecte	Total	7.88	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chlorophyll-b	Total		ug/l	ND	1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Chlorophyll-c	Total	1.01	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	10/11/2006	9:00	Pheophytin-a	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chlorophyll a, corrected f	Total	4.28	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chlorophyll a, uncorrecte	Total	5.59	ug/l		1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chlorophyll-b	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Chlorophyll-c	Total		ug/l	ND	1
BPJC-08	SALINE BRANCH	10/5/2006	11:00	Pheophytin-a	Total	1.96	ug/l		1
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Nitrogen, ammonia as N	Total	0.18	mg/l		0.024
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Nitrogen, Kjeldahl	Total	1.05	mg/l		0.098
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Nitrogen, Nitrite (NO2) + N	Total	0.842	mg/l		0.018
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Phosphorus as P	Total	0.154	mg/l		0.004
BPJCA-UC-D1	BONEYARD CREEK	7/10/2006	11:30	Temperature, sample		2	deg C		
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Nitrogen, ammonia as N	Total	0.24	mg/l		0.024
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Nitrogen, Kjeldahl	Total	0.556	mg/l		0.098
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Nitrogen, Nitrite (NO2) + N	Total	1.5	mg/l		0.018
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Phosphorus as P	Total	0.16	mg/l		0.004
BPJCA-UC-D1	BONEYARD CREEK	7/17/2006	9:35	Temperature, sample		3	deg C		
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Nitrogen, ammonia as N	Total	0.2	mg/l		0.024

StationCode	WaterbodyName	Date	Time	Analyte	Fraction	Result	Units	Qualifier	MDL
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Nitrogen, Kjeldahl	Total	0.41	mg/l	J	0.098
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Nitrogen, Nitrite (NO2) + N	Total	1.41	mg/l		0.018
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Phosphorus as P	Total	0.172	mg/l		0.004
BPJCA-UC-D1	BONEYARD CREEK	9/7/2006	10:00	Temperature, sample		15	deg C		
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Nitrogen, ammonia as N	Total	0.29	mg/l		0.024
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Nitrogen, Nitrite (NO2) + N	Total	1.17	mg/l		0.018
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Phosphorus as P	Total	0.191	mg/l		0.004
BPJCA-02	BONEYARD CREEK	9/7/2006	9:30	Temperature, sample		6	deg C		
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Nitrogen, ammonia as N	Total	1.3	mg/l		0.024
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Nitrogen, Nitrite (NO2) + N	Total	1.01	mg/l		0.018
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Phosphorus as P	Total	0.254	mg/l		0.004
BPJCA-03	BONEYARD CREEK	9/7/2006	11:00	Temperature, sample		6	deg C		

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