State of Utah
GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Utah Water Quality Board Meeting
Department of Natural Resources Building
1594 West North Temple Room 1005
Salt Lake City, UT 84116
December 16, 2014

Board Meeting Begins @ 9:00 a.m.
AGENDA

A. **Water Quality Board Meeting – Roll Call**

B. (Tab 1) **Minutes:**
Approval of Minutes for November 4, 2014 WQ Board Meeting .....Myron Bateman

C. **Executive Secretary's Report** .....Walt Baker

1. Organizational & Management Changes within DWQ .....Walt Baker
(Jodi Gardberg WQ Management Section & Kim Shelley UPDES Engineering Section)

D. (Tab 2) **Funding Requests:**
1. Financial Status Report .....Emily Cantón

2. Request to Authorize Funding: *for PRWID emergency repairs post flooding support*.....Lisa Nelson

3. Planning Advance Request: *Wellington City* .....John Cook

E. (Tab 3) **Rulemaking**:
1. Request to Adopt Rule R317-1-3.3, *Technology-based limits for Controlling Phosphorus* .....John Mackey

F. (Tab 4) **Other Business:**
1. 401 WQ Certification Process .....Toby Hooker

2. Present 2015 Board Meeting Calendar for Approval .....Walt Baker

G. (Tab 5) **News Articles:**

Next Meeting January 28, 2014
DEQ Building Board Room 1015
195 North 1950 West
Salt Lake City, Utah 84116

Revised 12/09/14

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Dana Powers, Office of Human Resources, at (801) 536-4412,
TDD (801) 536-4414, at least five working days prior to the scheduled meeting

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MINUTES
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
UTAH WATER QUALITY BOARD

DEQ Building Board Room 1015
195 North 1950 West
Salt Lake City, Utah 84116
November 4, 2014

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Myron Bateman	Shane Pace	Jennifer Grant
Leland Myers	Gregg Galecki	Merritt Frey
Hugo Rodier	Amanda Smith	Clyde Bunker

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Walt Baker, Leah Ann Lamb, Erica Gaddis, Carl Adams, Jodi Gardberg, John Mackey, Hilary Arens, Lisa Nelson, Emily Cantón, Judy Etherington, Svetlana Kopytkovskiy, Chris Bittner, Marsha Case, Nicole Froula, Jenny Potter.

OTHERS PRESENT

Name	Organization Representing
Trevor Lindley	J-U-B Engineers
Tom Ward	Salt Lake City
Jesse Stewart	Salt Lake City
W.D. Robinson	Epic Engineering
Craig Ashcroft	Carollo Engineers
Marisa Egbert	DWR
Bill Leeflang	DWR
Eric Millis	DWR
Mike Collins	Bowen Collins
Don Leonard	GSLBSCI
David Zook	Nibley City
Dan Tuttle	US Magnesium
Keith Morgan	Morton Salt
Laura Vernon	FFSL
Nick Schou	Utah Rivers Council
Rosalie Winard	URC
Lynn de Freitas	Friends of Great Salt Lake

Jim Bracher	River Heights City
Don Leonard	Brine Shrimp Industry
Trevor Lindley	JUB Engineering

Myron Bateman called the Board meeting to order at 9:31 AM and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF THE AUGUST 27, 2014 MEETING

Motion: **It was moved by Mr. Pace and seconded by Mr. Myers to approve the minutes of the September 24, 2014 Water Quality Board meeting. The motion was unanimously approved. Mr. Bunker and Ms. Grant abstained from the motion.**

EXECUTIVE SECRETARY REPORT

- Mr. Baker spoke briefly of the harmful algae bloom at Utah Lake.
- An ammonia criterion meeting was held in Washington D.C. last week. Discussed the recent changes to the ammonia standards, as well as the 2009 changes. They had restricted the levels based on presence of certain species of mollusks and snails, mussels that are more sensitive to ammonia. In 2017 we will have to accommodate this change in our standards. All POTW, have been notified of the change that may affect them.
- Waters of the US comments are due next week to EPA and the Corp of Engineers. DWQ received a draft from the Governor's office. This will be an important issue for the division.
- Leah Ann participated in a presentation to the Water Development Commission on long-term water needs to the state.
- Erica Gaddis has been selected as a new Branch Manager.
- Mr. Baker detailed the re-organization of the division with all permitting and compliance under Leah Ann Lamb and all monitoring and assessment under Erica Gaddis. Staff is now more equally divided between the two branches.

FUNDING REQUESTS

Request for Plea in Abeyance: Mr. Mackey presented reasoning for Bluff Service Area's request of Plea in Abeyance (P051 & P051b).

Motion: **Following a discussion on Bluff Service Area, Mr. Myers made a motion to approve the Plea in Abeyance for Bluff until a project is constructed. Mr. Bunker seconded the motion. The motion was unanimously approved.**

OTHER BUSINESS

Update on Utah Lake Harmful Algae Bloom: On October 6, 2014 DWQ was notified of a dog's death due to swimming and drinking water near the Lindon Marina on Utah Lake. A cyanobacteria bloom in the lake is the suspected cause of death of the dog. DWQ worked with Utah County Health Department, Utah State Parks and Recreation, and the Division of Wildlife Resources (DWR) on sampling and reporting of results to allow these entities to move forward on public-health advisories as needed. The Board will be provided new details should they arise. The most updated information is located on the Utah County Health Department's web page at: http://www.utahcountyonline.org/Dept2/Health/index.asp

Presentation of Bear River Development: The Bear River Act, passed in 1991 by the Legislature, directed the Division of Water Resources to "develop the surface waters of the Bear River and its tributaries". The Bear River Development Project will develop 220,000 ac-ft. of water to be delivered to Box Elder, Cache, Davis, Salt Lake, and Weber Counties. The Division of Water Resources recently completed a study that included the potential reservoir storage and conveyance facilities necessary to deliver the water. Currently, the DWR is continuing to refine the results of that study. DWR briefed the DWQ Board on the updates. Attached is a link to their presentation: http://gslcouncil.utah.gov/docs/2014/10Oct/BearRiverPipelineProject.pdf

Comments were made by: Clyde Bunker; Shane Pace; Walter Baker; G.Tuttle – US Magnesium; K. Morton – Morton Salt; Don Leonard- Brine Shrimp Industry; Lynn **de Freitas**- Friends of the Great Salt Lake; Zach Frankel-Rivers Council; and Nick Schou- Rivers Council. All comments and discussion can be heard at: http://www.utah.gov/pmn/index.html

Logan Funding Update: Ms. Nelson requested that the WQB allow an additional four months for the communities to negotiate and execute an inter-local agreement. During that time, the WQB will not change the conditions of the January 22, 2014 loan authorization.

Comments were made by: Clyde Bunker, Walter Baker and Shane Pace. All comments and discussion can be heard at: http://www.utah.gov/pmn/index.html

Motion: **Following a discussion on granting an extension to The Logan City funding, Mr. Meyers made a motion to grant an extension until April 1, 2015. Mr. Pace seconded the motion. The motion was unanimously approved.**

Next Meeting – December 16, 2014
Department of Natural Resources
1594 West North Temple RM 1005
Salt Lake City, UT 84116

Myron Bateman, Chair
Utah Water Quality Board

UTAH DIVISION OF WATER QUALITY

DEPARTMENT OF ENVIRONMENTAL QUALITY

Address:
Multi-Agency State Office Building
195 North 1950 West
Post Office Box 144870
Salt Lake City, Utah 84114-4870
Telephone: (801) 536-4300
FAX Number: (801) 536-4301

DIRECTOR
DIVISION OF WATER QUALITY
Walter L. Baker, P.E. Director

Finance
Stacy Carroll - Adm Serv Mng

Administration
Jenny Potter - Support Staff Supervisor

ENGINEERING, GROUNDWATER & UPDES BRANCH
Leah Ann Lamb

WATERSHED, MONITORING & WATER QUALITY BRANCH
Erica Gaddis, Ph.D

UPDES ENGINEERING SECTION
Kim Shelley-ENG MGR I

- UPDES Permit Issuance
- Industrial
- Municipal
- Federal
- General
- Biosolids
- Biomonitoring Mngt/TRE
- Industrial Pretreatment
- Sanitary/Combined Sewer Overflow (SSO/CSO)
- Pesticides Permits
- USMP Permits

GROUNDWATER PROTECTION SECTION
Dan Hall -EP Mgr I

- Ground Water Quality Standards
- Ground Water Classification
- GW Permit Management
- GW Technology Transfer
- Underground Injection Control
- Compliance Inspections
- Enforcement

UPDES IES SECTION
Jeff Studenka - EP Mgr I

- Stormwater
  - Industrial
  - Construction
  - Municipal
  - Post Construction
- CAFO
- Compliance Inspections
- Enforcement
- ICIS Database Management
- Stormwater Database Managem

ENGINEERING SECTION
John Mackey - Eng Mgr I

- Federal Revolving Loans
- State Revolving Loans
- Hardship Grants
- CIB Project Administration
- Construction Permits (Fin. Asst.)
- Needs Survey
- WW Operator Certification
- O&M Training
- Technical Assistance
- Construction Permits
  - Municipal
  - Industrial
  - Agricultural
  - Storm Sewers
  - Underground WW Disposal
- Technology Evaluation
- Local Health Department Liaison
- On-Site WW Disposal
- On-Site WW Certification
- O & M Inspections

TMDL/WATERSHED SECTION
Carl Adams - EP Mgr I

- TMDL Development
- TMDL Implementation (Tracking)
- Watershed Planning
- Lake Assessment Program
- EIS Reviews

MONITORING & REPORTING SECTION
Jim Harris -EP Mgr I

- Lake & Stream Monitoring
- STORET Database
- Non Point Source Monitoring
- Compliance Monitoring
- Biological Monitoring
- Special Studies
- Intensive Surveys
- Laboratory Quality Assurance
- Biomonitoring
- Ground Water Monitoring
- Volunteer/Coop. Monitoring

WATER QUALITY WQ MANAGEMENT SECTION
Jodi Gardberg-WQ MNGT

- Water Quality Standards
- 401 WQ Certification/Wetlands
- WQ Assessment & Reporting
- Lake Assessment Program
- 303(d) List/305 (b) Report
- Wasteload Allocations/Permits
- Nonpoint Source Program
  - AFO/CAFO
  - 319 Grants Management
- 604b Grants Management
- EIS Reviews

C-1

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Finance
Stacy Carroll - Adm Serv Mng
Sharon Schofield - Financial Analyst II

Administration
Jenny Potter - Support Staff Supervisor
Marsha Case - Archvist I
Ilene Staker - Office Technician II
Paula Harvey-Office Technician II
Nicole Froula - Office Technician II

ENGINEERING, GROUNDWATER & UPDES BRANCH
Leah Ann Lamb

WATERSHED, MONITORING & WATER QUALITY BRANCH
Erica Gaddis, Ph.D

UPDES ENGINEERING SECTION
Kim Shelley-ENG MGR I
Matthew Garn - Eng III
Dan Griffin Eng III
Jen Robinson - Eng II
Ken Hoffman - ES III
Kim Shelley Eng II
Mike Herkimer ES IV
Dave Wham ES
Vacant

UPDES IES SECTION
Jeff Studenka - EP Mgr I
Donald Hall- ES III
Harry Campbell Eng III
Lonnie Shull ES III
Mike George - ES III
RhondaThiele ES III
Edith Van Vleet-En PrgCrd
Jeanne Riley- ES III
Monique Rodriguez-En PrgCrd

ENGINEERING SECTION
John Mackey - Eng Mgr I
Lisa Nelson, - Eng III
Judy Etherington-Env Pg Coord
Beth Wondimu, Eng II
Svetlana Kopytkovskaya, -Eng III
Emily Canton
David Snyder - ES III
John Cook- Eng III
John Kennington Eng III
Ostler, Kathy Acct Tech
Paul Krauth - Eng IV

TMDL/WATERSHED SECTION
Carl Adams - EP Mgr I
Scott Daly- ES III
Mike Allred - ES III
Hilary Arens ES III
Amy Dickey-ES III
Dave Wham - ES IV
Kari Lundeen - ES III
Sandy Wingert -ES III
Jim Bowcutt -ES III

MONITORING & REPORTING SECTION
Jim Harris -EP Mgr I
Dan English - ES II
Calah Seese -ES II
Lenora Sullivan -ES III
Alex Anderson - ES II
Robert Bird ES II
Ben Brown -ES II
Tricia Johnson -ES II
Brent Shaw-ES II
Suzan Tahir - ES II

WATER QUALITY WQ MANAGEMENT SECTION
Jodi Gardberg-WQ MNGT
Chris Bittner ES IV
Nick Von Stackelberg ES IV
Mark Stanger-ES III(GIS)
Mike Shupryt - ES III
Ben Holcomb ES III
Jodi Gardberg - ES III
Bill Damery - ES III
Emilie Flemer -ES III
J. Ostermiller ES IV

GROUNDWATER PROTECTION SECTION
Dan Hall -EP Mgr I
Keith Eagan - ES III
Brian Hamos - ES III
Ed Hickey - ES III
Candace Cady- ES III
Brianna Ariotti-ES I
Mark Novak - ES III
Woodrow Campbell - Eng III

C-2

LOAN FUNDS
FINANCIAL PROJECTIONS

STATE REVOLVING FUND (SRF)	2nd Qtr FY 2015 Oct - Dec 2014	3rd Qtr FY 2015 Jan - Mar 2015	4th Qtr FY 2015 Apr - June 2015	1st Qtr FY 2016 July - Sept 2015	2nd Qtr FY 2016 Oct - Dec 2015	3rd Qtr FY 2016 Jan - Mar 2016	4th Qtr FY 2016 Apr - June 2016	1st Qtr FY 2017 July - Sept 2016	2nd Qtr FY 2017 Oct - Dec 2016	3rd Qtr FY 2017 Jan - Mar 2017	4th Qtr FY 2017 Apr - June 2017	1st Qtr FY 2018 July - Sept 2017	2nd Qtr FY 2018 Oct - Dec 2017
Funds Available													
SRF - 1st Round (LOC) 2013 Cap Grant	$ (2,656,480)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Less: 2013 Principal Forgiveness Amount	(495,019)	-	-	-	-	-	-	-	-	-	-	-	-
SRF - 1st Round (LOC) 2014 Cap Grant	7,067,520	-	-	-	-	-	-	-	-	-	-	-	-
Less: 2014 Principal Forgiveness Amount	(600,934)	-	-	-	-	-	-	-	-	-	-	-	-
State Match	1,472,400	-	-	-	-	-	-	-	-	-	-	-	-
SRF - 2nd Round	72,017,570	72,617,919	72,218,710	75,041,624	77,060,450	78,760,351	83,583,588	(4,890,420)	(15,933,344)	(14,353,942)	(9,668,085)	(5,939,865)	(17,606,910)
Interest Earnings at 0.5%	90,022	90,772	90,273	93,802	96,326	98,450	104,479	-	-	-	-	-	-
Loan Repayments	(530,160)	5,110,019	2,732,640	1,925,024	1,603,576	4,724,786	3,571,513	1,957,076	1,579,402	4,685,856	3,728,221	1,979,954	1,152,332
Total Funds Available	76,364,919	77,818,710	75,041,624	77,060,450	78,760,351	83,583,588	87,259,580	(2,933,344)	(14,353,942)	(9,668,085)	(5,939,865)	(3,959,910)	(16,454,578)
Project Obligations													
Ephraim City	(1,625,000)	-											
Granger-Hunter Improvement District	(702,000)	-	-	-	-	-	-	-	-	-	-	-	-
Kearns Improvement District (2011)	(1,265,000)	-	-	-	-	-	-	-	-	-	-	-	-
South Valley WRF - NonPoint Source	(155,000)	-	-	-	-	-	-	-	-	-	-	-	-
Loan Authorizations													
Eureka City	-	(1,300,000)	-	-	-	-	-	-	-	-	-	-	-
Francis City	-	(4,300,000)	-	-	-	-	-	-	-	-	-	-	-
Logan City	-	-	-	-	-	-	(70,000,000)	-	-	-	-	-	-
Snyderville Basin WRD	-	-	-	-	-	-	(22,150,000)	-	-	-	-	-	-
Planned Projects													
Ammonia Projects	-	-	-	-	-	-	-	-	-	-	-	(13,647,000)	-
Phosphorus Projects	-	-	-	-	-	-	-	-	-	-	-	-	(23,377,500)
Salem	-	-	-	-	-	-	-	(13,000,000)	-	-	-	-	-
Total Obligations	(3,747,000)	(5,600,000)	-	-	-	-	(92,150,000)	(13,000,000)	-	-	-	(13,647,000)	(23,377,500)
SRF Unobligated Funds	$ 72,617,919	$ 72,218,710	$ 75,041,624	$ 77,060,450	$ 78,760,351	$ 83,583,588	$ (4,890,420)	$ (15,933,344)	$ (14,353,942)	$ (9,668,085)	$ (5,939,865)	$ (17,606,910)	$ (39,832,078)

UTAH WASTEWATER LOAN FUND (UWLF)	2nd Qtr FY 2015 Oct - Dec 2014	3rd Qtr FY 2015 Jan - Mar 2015	4th Qtr FY 2015 Apr - June 2015	1st Qtr FY 2016 July - Sept 2015	2nd Qtr FY 2016 Oct - Dec 2015	3rd Qtr FY 2016 Jan - Mar 2016	4th Qtr FY 2016 Apr - June 2016	1st Qtr FY 2017 July - Sept 2016	2nd Qtr FY 2017 Oct - Dec 2016	3rd Qtr FY 2017 Jan - Mar 2017	4th Qtr FY 2017 Apr - June 2017	1st Qtr FY 2018 July - Sept 2017	2nd Qtr FY 2018 Oct - Dec 2017
Funds Available													
UWLF	$ 13,282,771	$ 11,341,599	$ 11,605,381	$ 11,958,616	$ 12,985,166	$ 13,963,516	$ 15,310,251	$ 17,088,613	$ 18,115,296	$ 19,098,646	$ 20,392,076	$ 22,324,831	$ 23,354,614
Sales Tax Revenue	421,227	421,227	-	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875
Loan Repayments	220,000	782,080	1,182,760	469,200	421,000	789,385	1,221,012	469,333	426,000	736,080	1,375,404	472,433	430,000
Total Funds Available	13,923,999	12,544,906	12,788,141	13,324,691	14,303,041	15,649,776	17,428,138	18,454,821	19,438,171	20,731,601	22,664,356	23,694,139	24,681,489
General Obligations													
State Match Transfer	(1,472,400)	-	-	-	-	-	-	-	-	-	-	-	-
DWQ Administrative Expenses	-	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
Project Obligations													
Murray City	(1,110,000)	-	-	-	-	-	-	-	-	-	-	-	-
Loan Authorizations													
Eagle Mountain City - White Hills	-	-	(490,000)	-	-	-	-	-	-	-	-	-	-
Planned Projects													
*Price River Water Improvement District	-	(600,000)	-	-	-	-	-	-	-	-	-	-	-
Total Obligations	(2,582,400)	(939,525)	(829,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
UWLF Unobligated Funds	$ 11,341,599	$ 11,605,381	$ 11,958,616	$ 12,985,166	$ 13,963,516	$ 15,310,251	$ 17,088,613	$ 18,115,296	$ 19,098,646	$ 20,392,076	$ 22,324,831	$ 23,354,614	$ 24,341,964

*Projects being presented to the WQB
Date Printed: 12/9/2014

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DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Date Received: December 16, 2014
Date to be presented to the WQB: December 16, 2014

WATER QUALITY BOARD
REQUEST FOR HARDSHIP GRANT

APPLICANT:	Price River Water Improvement District PO Box 903 Price, Utah 84501 Telephone: 435-637-6351
PRESIDING OFFICIAL	Richard Tatton – Chairman, Board of Trustee PO Box 903 Price, Utah 84501 Telephone: 435-637-6351
CONTACT:	Jeffrey R. Richens, District Manager PO Box 903 Price, Utah 84501 Telephone: 435-637-6351
TREASURER:	Kaye Cripps
CONSULTING ENGINEER:	Cory Christiansens, Water Works Engineers 233 South Pleasant Grove Blvd. Pleasant Grove, UT 84062 801-485-4105 ext 111
CITY ATTORNEY:	TBD
BOND COUNSEL:	TBD
FINANCIAL ADVISOR	TBD

APPLICANT'S REQUEST

Price River Water Improvement District (PRWID) is requesting a grant from the Water Quality Board in the amount $600,000 for replacement and rehabilitation of facilities lost or damaged during flooding that inundated the District's wastewater treatment plant in late September 2014.

APPLICANT'S LOCATION

The City of Price is located in Carbon County, Utah approximately 120 miles south east of Salt Lake City. The PRWID regional wastewater treatment facility is located in Wellington, approximately 5 miles east of Price.

INTRODUCTION

Price River flooded the PRWID treatment facility in late September 2014 causing significant damage to their facility. Extensive damage to facilities and equipment including pumps, air blowers, motors, electrical power gear and controls resulted when the Price River inundated the wastewater treatment facility and flooded the tunnels. During the emergency, wastewater treatment basins were flooded causing untreated wastewater to overflow onto surrounding land and ultimately back into the river drainage. Fifty percent of the plant was immediately put out of commission.

PROJECT NEED

Treatment capability at PRWID was able to be restored using temporary measures and the facility is now back in compliance with its permit for all water quality parameters except ammonia. Restoration of damaged equipment is required for facility safety and performance reliability.

ALTERNATIVES EVALUATED

- No Action
- Repairs with no dike
- **Repairs with construction of a river dike (preferred alternative)**

PROJECT DESCRIPTION

The project will include:
1. Engineering and construction management
2. Repair and replacement of damaged or destroyed process equipment and infrastructure
3. Construct a new river dike to prevent future storm events from damaging the facility.

POSITION ON PROJECT PRIORITY LIST

PRWID is currently ranked **2nd** of 17 on the Project Priority List (PPL). Fifteen of the other projects on the PPL have already had funding authorized by the Water Quality Board.

POPULATION

Current population:	19,630
Population in 2010:	19,552
Population in 2020:	19,747

CURRENT USER CHARGE

Currently, PRWID charges an average user fee of $21.87 per connection per month for wastewater treatment and disposal. Member cities, on average, charge an additional $8.97 per month for sewer services. The average sewer connection in the District pays a total of $30.84 per

month. The highest sewer fee in the District is paid by residents of Helper City at $35.00 per month. According to the Utah Water Quality Board affordability criteria of 1.4% of MAGI, an affordable monthly user fee for sewer services for the PRWID area is $47.45.

The estimated monthly cost for sewer service including this project with a loan term of **20 years** is as follows:

Funding Model	Monthly User Fee	% of MAGI
All WQB Grant[1]	**$29.31**	**0.86%**
Grant/Loan (half loan at 0%)	$29.53	0.87%
All Loan (0 %)	$29.74	0.88%
All Loan (1.5%)	$29.81	0.88%

[1]Applicant's request

IMPLEMENTATION SCHEDULE

Introduction to WQB for Funding:	December 16, 2014
WQB Funding Authorization:	January 21, 2014
Facility Plan Approval:	January 2014
Loan Closing	February 2014
Commence Facility Design	February 2014 – March 2014
Issue Construction Permit:	March 2014
Advertise for Bids:	March 2014
Bid Opening:	April 2014
Commence Dike Construction	April 2014
Complete Construction	July 2014

COST ESTIMATE

Legal, Bonding, Admin	$	20,000
DWQ Loan Origination Fee	$	6,000
Contractor/Rental Services	$	52,000
Equipment Purchases	$	505,000
Pre-Construction Engineering	$	5,000
River Dike Engineering	$	20,000
River Dike Construction	$	292,000
Buildings and Grounds	$	218,000
Contingency	$	82,000
Total	**$**	**1,200,000**

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Operation & Maintenance - Annual	$	1,948,000
WQB Debt Service (0% all loan, 20 years)	$	30,000
WQB Debt Service (1.0% all loan, 20 years)	$	33,249
WQB Debt Service (1.5% all loan, 20 years)	$	34,947
CIB Debt Service (1.0% 20 years)	$	30,000
WQB Required Reserves at 1.5% (1½ pmt/6 yrs)	$	8,737
Price MAGI (2012)	$	40,668
'Affordable' Monthly Cost/ERU at 1.4% MAGI	$	47.45
Proposed Monthly Sewer Cost at 1% loan	$	29.81
Current Impact Fee	$	1,252

APPLICANT'S PREFERRED FUNDING PACKAGE

The Applicant's proposed Wastewater Flood Recovery project is estimated to cost $1,200,000 with funding sources as shown below. The District has already incurred approximately $200,000 in emergency services costs and hundreds of overtime hours. The District will pay all additional costs beyond the $1,200,000 requested.

Funding Source	Cost Sharing	Percent of Project
PCIB Grant	$600,000	50%
WQB Grant	$600,000	50%
Total Amount:	$1,200,000	100%

STAFF COMMENTS AND RECOMMENDATION:

Staff frequently presents a request for funding first as an introduction and later in a request for authorization. In this case, because PRWID is an urgent situation and its funding needs are well defined, we are requesting immediate authorization of PRWID's funding request without a prior introduction.

Staff recommends that the Water Quality Board authorize PRWID a **$600,000** loan at **1.0%** interest rate with a repayment term of 20 years.

SPECIAL CONDITIONS:

1. PRWID must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).

2. As a part of the facility planning, PRWID must complete a Water Conservation and Management Plan.

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File: SRF-PRWID, Admin, Section 1

Price River Water Improvement District
Wastewater Treatment - Flood Recovery Project

Project Costs

Legal and Bonding	$	20,000
Engineering - Planning	$	5,000
Engineering - Design (River Dike)	$	20,000
Contractor/Rental Services	$	52,000
Equipment Purchases	$	505,000
Construction (River Dike)	$	292,000
Loan Origination Fee	$	6,000
Buildings and Grounds	$	218,000
Contingency on Construction (28%)	$	82,000
Total Project Cost:	$	1,200,000

Project Funding

WQB Grant Amount	$	-
WQB Grant Amount	$	600,000
CIB Loan Amount (estimated at 1% 20 yr):	$	600,000
Total Project Funding:	$	1,200,000

Current Customer Base & User Charges

Residential Customers (ERU):	6,817
Comm/Indust Customers (ERU):	521
Total Customers (ERU):	7,338
Average MAGI for Price (2012)	$40,668
Average Impact& Connection Fee (per ERU):	$1,252
Average Monthly Treatment User Fee (per ERU):	$21.87
Average Monthly Collection User Fee (per ERU):	$8.97
Total Average Monthly User Fee (per ERU):	$30.84

Funding Conditions

Loan Repayment Term (years):	20
Reserve Funding Period:	6

Total O&M expenses Treatment & Collection	$	1,948,000
Existing Debt Service	$	525,833

ESTIMATED COST OF SEWER SERVICE

WQB Loan Amount	WQB Grant Amount	WQB Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	CIB Loan Debt Service	CIB Loan Reserve	Existing Debt Service	Total Annual Sewer Treatment O&M Cost	Total Annual Collection System O&M Cost	Total Annual Sewer Cost	Annual Revenue from User Charges	Cost/ERU in Monthly Sewer Fees	Sewer Cost as a percent of MAGI
$600,000	$0	0.00%	$30,000	$7,500	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,618,716	$2,715,647	$29.74	0.88%
$600,000	$0	1.00%	$33,249	$8,312	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,622,778	$2,715,647	$29.79	0.88%
$600,000	$0	1.50%	$34,947	$8,737	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,624,901	$2,715,647	$29.81	0.88%
$300,000	$300,000	0.00%	$15,000	$3,750	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,599,966	$2,715,647	$29.53	0.87%
$300,000	$300,000	1.00%	$16,625	$4,156	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,601,997	$2,715,647	$29.55	0.87%
$300,000	$300,000	1.50%	$17,474	$4,368	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,603,058	$2,715,647	$29.56	0.87%
$0	$600,000	0.00%	$0	$0	$33,249	$8,312	$525,833	$1,948,000	$65,822	$2,581,216	$2,715,647	$29.31	0.86%

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Application Number: _____
Date Received: November 13, 2014
Date to be presented to the WQB: December 16, 2014

WATER QUALITY BOARD
FEASIBILITY REPORT FOR PLANNING ADVANCE
AUTHORIZATION

APPLICANT:	Wellington City 150 West Main Wellington, Utah 84542 Telephone: (435) 637-5213
PRESIDING OFFICIAL:	Joan Powell, Mayor
TREASURER/RECORDER:	Glenna Etzel, Recorder
CONSULTING ENGINEER:	Johnathan Johansen, PE Johansen & Tuttle Engineering, Inc. Telephone: (435) 381-2523
BOND COUNSEL:	Blaisdell & Church 5995 South Redwood Road Salt Lake City, Utah 84123 (801) 261-3407

APPLICANT'S REQUEST:

Wellington is requesting financial assistance in the amount of a $32,000 planning advance to investigate options for repairing or replacing the sewer main under Highway 6 because of corrosion. Additionally, the City would like to investigate options for extending sewer to 13 homes that are on septic systems that were recently flooded by the Price River.

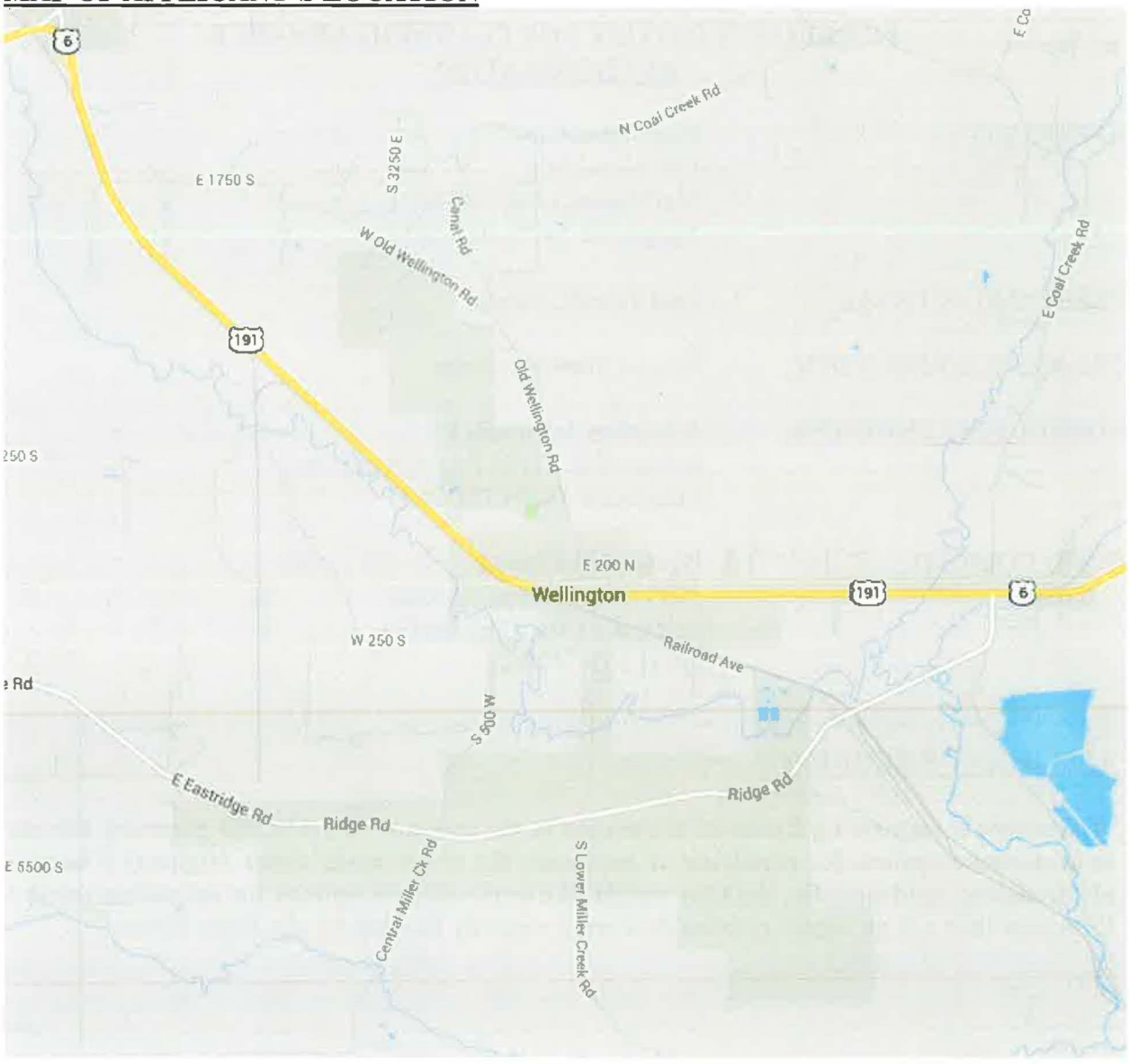
APPLICANT'S LOCATION:

Wellington is the eastern-most city in the Price Valley

BACKGROUND:

Wellington is located on the east side of the Price Valley on Highway 6. It has primarily agricultural and residential areas. The 2010 Census population for Wellington was 1,676. Currently sewage is collected and delivered to the Price River Water Improvement District and discharged into the Price River after treatment.

MAP OF APPLICANT'S LOCATION



PROJECT NEED:

The sewer main under Highway 6 is in poor condition. Wellington is currently spending over $20,000 per year in emergency repairs on the pipeline. Because of previous failures on this line, the City TVs their entire sewer system every five years and flush the entire system every three years.

Additionally, there are thirteen homes in the City that are on septic systems that were recently flooded by the Price River in September. Extensive pumping and cleaning has always been required for septic systems in this area. Therefore, the City wants to investigate the potential for extending sewer to residents on septic systems.

ALTERNATIVES TO BE EVALUATED:

The City plans to evaluate the following alternatives:

1. Slip lining the sewer main in Highway 6
2. Replacing the sewer main in Highway 6
3. Extending sewer to existing residents on septic systems.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 13th out of 17 projects on the Wastewater Treatment Project Priority List.

POPULATION GROWTH:

The Governor's Office for Planning and Budget shows the following projections for Wellington City:

Year	Population
2010	1,676
2020	1,692
2030	1,730
2040	1,790
2050	1,847
2060	1,909

PLANNING SCHEDULE:

Apply to WQB for Planning Advance:	December 16, 2014
Planning Completion	March 2015
Construction Completion	September 2016

COST ESTIMATE:

Consulting Engineer	$32,000
Total Planning Cost:	$32,000

STAFF RECOMMENDATION:

Staff recommends that the Water Quality Board authorize a $32,000 Planning Advance to the City of Wellington for facility planning associated with the repair or replacement of the sewer main in Highway 6 and the possibility of expanding sewer collection to residents on septic systems.

SPECIAL CONSIDERATIONS:

1. This Planning Advance is anticipated to lead to a request for construction funding that allows timely repayment of the Planning Advance. The GRANTEE agrees that if at any time it determines not to proceed with this project it will repay the advance in full ***no later than September 30, 2016.*** To ensure that this condition is legally enforceable, the City Council must adopt a resolution by which the GRANTEE (1) agrees that its obligation to repay the Planning Advance by the deadline is payable only from sewer revenues generated from the GRANTEE's sewer system (or loan proceeds if the GRANTEE secures funding from the Water Quality Board); (2) certifies that the sewer system revenues are adequate to cover all operation and maintenance expenses of the system and to cover all debt service requirements on all outstanding sewer revenue bonds of the GRANTEE; (3) certifies that the obligation of the GRANTEE to repay the Planning Advance from its sewer revenue is on a parity basis with all outstanding sewer revenue bonds of the GRANTEE; and (4) covenants that the GRANTEE will not issue any other sewer revenue bonds without the prior written approval of the Water Quality Board until the Planning Advance has been fully repaid. This acceptance of the GRANTEE's request shall not be effective until a copy of that resolution, in form acceptable to the Water Quality Board, has been supplied to the BOARD, at which time the BOARD's representative will execute this form.

2. The Division of Water Quality must approve the engineering agreement and plan of study before the advance is executed.

State of Utah

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Department of
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Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MEMORANDUM

TO: Water Quality Board

THROUGH: Walter L. Baker, P.E.

FROM: John Mackey, P.E.

DATE: December 16, 2014

SUBJECT: Summary of Public Comments and Request to Adopt Proposed Rule R317-1-3.3, Technology-Based Effluent Limits for Controlling Phosphorus Pollution

Purpose

The purpose of this memorandum is to request that the Utah Water Quality Board adopt proposed changes to Rule R317-1-3, Requirements for Waste Discharges, which establishes Technology-Based Phosphorus Effluent Limits (TBPEL) and nutrient monitoring requirements for all waste discharges into waters of the state. The proposed rule is attached.

Rulemaking and Public Comments

The Water Quality Board originally authorized this rulemaking on April 30, 2014. Since that time, the proposed rule and two subsequent recommended changes to the proposed rule (CPR) have been posted for public comment three times, collectively providing 120-days for the public and interested stakeholders to comment on the proposed rule. Eight commenters provided 38 comments to the original proposed rule. Staff issued its response to these comments and provided a summary response to the Board on August 27, 2014. Five commenters provided 25 comments to the two subsequent CPRs. Summary sheets outlining the 25 comments on the two CPRs and providing staff's responses to these comments and our recommendations are attached.

Recommendation

Staff recommends that the Water Quality Board adopt the proposed changes to *Utah Administrative Code, R317-1-3* and that it be made effective January 1, 2015.

Attachments: Proposed R317-3-1-3, Requirements for Waste Discharges
Responsiveness Summaries to Public Comments Received on CPR1 and CPR2

DWQ-2014-016202.docx

Responsiveness Summary for Changes in Proposed Rule 1 and 2 Amendment to Rule R317-1-3.3 Technology-Based Phosphorus Effluent Limits			
Comment Number	Commentor	Comment	DWQ Response
A1	ATK Launch Systems	Narrowed Exceptions (Now Variances). CPR1 would eliminate all exceptions to the proposed technology standard and would, instead, provide for flexibility under the rule as achieved through variances that would be periodically reviewed. The revised characterization of exceptions as limited variances is confounding in at least two ways. First, it would improperly broaden the applicability of the rulemaking by, among other things, eliminating the de minimis exception. ATK maintains that there are circumstances where a de minimis exception is appropriate. For example, no technology-based limit or loading cap should apply if a discharge does not result in increased loading of phosphorus to the receiving water. As noted in ATK's initial comments, the de minimis exception could be directly relevant to ATK given existing data indicating that Blue Springs (the source of Blue Creek) potentially has ambient phosphorus concentrations up gradient from the ATK facilities. As such, ATK maintains that nutrient concentrations in discharges with phosphorus related to -- or no different from – concentrations in the intake water should be accepted from the rule (as opposed to requiring ATK to seek a variance - which lacks specificity, based on showing that limits and a cap "are clearly unnecessary"). In fact , ATK recommends that same exception be available to discharges that use chemicals necessary for proper cooling tower operation. As further explained below, the use of nutrient-based chemicals in cooling towers is efficient and effective and may not be able to be replaced for a reasonable cost. The de minimis exception would provide defensible flexibility to the rule's applicability.	The intent of the proposed exceptions was to provide a mechanism to reduce or eliminate the burden of the rule when that burden is excessive or unnecessary. The term "exceptions" was replaced with "variances" to clarify that should discharging conditions change, the applicability of the variance would be re-assessed by the Director. The "de minimus variance" was eliminated because it was unworkable as written. A percentage gain in phosphorus concentration is unsupportable and arbitrary. Dischargers that believe their effluent has a minimal or nominal impact on the receiving stream may apply for variance under R317-1-3.3.C.2.c, which allows dischargers to demonstrate that the technology-based effluent limit is unnecessary to protect downstream waters. The case where source water has high background concentrations is covered by existing Rule R317-1-3.4 Pollutants In Diverted Water Returned To Stream. Pollutants added to a diverted water must be addressed as indicated in the diverted water rule.
A2	ATK Launch Systems	Second, to the extent those exceptions to the rule would be eliminated or amended or characterized as variances, a discharging industrial source could be required to treat flows with background nutrient concentrations unrelated to the discharger's operations. ATK suggests that the exceptions to the nutrient rule be retained and the variance provisions specifically drafted to reflect circumstances that require periodic review.	Dischargers are not required to treat background pollutants per R317-1-3.4 Pollutants in Diverted Water
A3	ATK Launch Systems	Economic Hardship. The proposed economic hardship provisions recognize detailed qualifying criteria for discharges from publicly owned treatment works (POTWs). The provision has also been properly revised to reflect a willingness to consider "other demonstrations of economic hardship on a case-by-case basis." CPR1, R317-1-3.3.C.I.b. ATK supports the proposed change to allow for site-specific economic hardship considerations. To that end, ATK reiterates its views (more fully detailed in the initial comments) that DWQ has not fully considered economic implications of the proposed rulemaking on industry. Based on information provided by a water treatment chemical vendor, phosphonates and polymers have become the mainstay of the treatment products considered "state-of-the-art" as they are used for corrosion and deposition control in boilers and cooling towers. Costs associated with these water treatment products would substantially increase if phosphonates, in particular, were removed from available options for the treatment of water in boilers and cooling towers . ATK suggests that DWQ consider the economic impact this rule will have on water treatment chemicals which are widely used by industry.	We agree that there will be cases where water treatment chemicals need to be considered for nutrient reduction. Most of these cases will be resolved through chemical optimization or replacement. Industrial chemistry for replacement of phosphates used for chemical sequestering is well established and economical; however, an economic hardship variance is available for cases where replacement is not feasible.

A4	ATK Launch Systems	Proposed Self-Monitoring. ATK understands that the proposed rulemaking would waive monitoring for nitrogen, phosphorus and other constituents if "a discharging treatment works demonstrates to the Director that there is no reasonable potential to discharge nitrogen or phosphorus." CPR1, R317-1-3.3.D.3. In fact (and in contrast), the National Pollutant Discharge Elimination System (NPDES) regulations clarify that the burden for assessing reasonable potential is on the Director, not the discharger. 40 CFR 122.44(d) (1) (ii). The CPRI 's seeming shift of the burden from DWQ to the discharger, e.g., industry, does so without considering the cost to industry. ATK recommends DWQ clarify that the burden for evaluating reasonable potential is on the Director; dischargers can, of course , provide information to support the Director's determination.	The requirement that the discharger demonstrate no reasonable potential was revised in Change in Proposed Rule #2: R317-1-3.3.D.2 The Director may authorize a variance to the monitoring requirements identified in Subsection R317-1-3.3.D.1.
B1	Canyon Fuels Skyline Mine	3.3 A Technology-based Effluent Limits. A better definition of "Technology-based" would be appropriate here, unless the intention is to leave the division a wide latitude to arbitrarily approve of effluent limits.	The proposed Technology-Based Effluent Phosphorus Limit is 1 mg/L for non-lagoon discharging facilities in Utah. There is not latitude in this limit without a variance. The TBPEL of 1 mg/L was not selected arbitrarily. Rather, it was selected based on: (1) well documented phosphorus removal capabilities of conventional wastewater treatment plants that incorporate state-of-the-art chemical and/or biological systems; and (2) benchmarking similar phosphorus pollution control measures implemented in other western states.
B2	Canyon Fuels Skyline Mine	3.3 B-2: Cap of 125% of current average annual total phosphorus load for treatment lagoon systems. Does this assume a current average annual total phosphorus load of greater than 1.0 mg/l? If so, it should be specified. If a current average annual total phosphorus load is below the lab reporting limit of 0.05 mg/l, and the cap is not specified at those already over 1.0 mg/l, as with non-lagoon systems, then the discharger would then be held to a cap of 0.0625 mg/l, which would be overly constraining, where the non-lagoon limit is 1.0 mg/l.	No, it is not the intent of this rule to establish lagoon system loading caps for facilities that discharge well below 1 mg/L.
B3	Canyon Fuels Skyline Mine	3.3 C-1-b Economic hardship demonstration. Economic hardship criteria given for POTW, but no criteria given for what constitutes an "Economic hardship" for other industries.	3.3.C.1.b in CPR1 establishes that the Director will consider other demonstrations of economic hardship on a case-by-case basis to allow non-POTWs to demonstrate economic hardship.
B4	Canyon Fuels Skyline Mine	3.3 D-1 Monthly monitoring. Requirement for monthly monitoring is entirely too stringent.	CPR2 establishes a mechanism for the Director to issue variances to some or all of the monitoring requirements of the proposed Rule. See R317-1-3.3.D.2.
B5	Canyon Fuels Skyline Mine	3.3 D-2 Monitoring waiver. States that if treatment works can demonstrate that there is no reasonable potential to discharge N or P monitoring can be waived. What is the criteria for "no reasonable potential to discharge N or P?" How much data required to show no potential for discharge? There is a potential for arbitrary waivers without defined guidance on what constitutes reasonability.	This monitoring requirement was changed in CPR2. The burden of proof will be established on a case-by-case basis but in general, the Director will rely on a combination of historical data, discharger certification, and supplemental monitoring to establish no reasonable potential for nitrogen and/or phosphorus pollution. The Division will conduct the supplemental monitoring in the first four months of 2015 to assist the Director in determining reasonable potential for dischargers of unqualtified or unknown potential to discharge nutrients. Effluent from these dischargers will be screened for nitrogen and phosphorus species using three initial sampling rounds; where necessary, further sampling will be conducted to to complete the determination of reasonable potential.

C1	Energy West Mining Co.	3.3 D. 1. a. The rule will require monitoring of influent and effluent. In our case as a coal mine with multiple influents or inaccessible influents, the monitoring of influents is either impracticable, as a typical coal mine may have hundreds of groundwater influent points, or impossible, in the case where an underground mine is physically sealed and the influent (intercepted groundwater) is physically inaccessible and only the effluent is accessible. We have mines with both situations. The rule should allow exceptions in these cases where the influent is inaccessible.	If it is unsafe or impossible to collect an influent sample, the Director will waive this requirement.
D1	Pacific States Cast Iron Pipe Company	PSCIPCO is a potential affected industry based upon the most recent proposed rule for Technology-Based Limits for Controlling Nutrient Pollution (Proposed Rule). PSCIPCO utilizes a once-through, non-contact cooling water system in its process and discharges this stream into waters of the state. As a potential affected industry PSCIPCO appreciates the opportunity to provide comments to the proposed rule.	Thank you for taking time to comment on the proposed rule.
D1-A	Pacific States Cast Iron Pipe Company	The proposed rule should not apply to direct industrial discharges. Industry representatives were not identified, nor invited to participate in any aspect of this rulemaking until the last minute to provide comment during the public comment period. Representatives only from agriculture, drinking water utilities, POTWs, environmental interests, recreation, storm water interests, and academia were invited and participated in this process.	The Division conducted a broad outreach effort to include many stakeholders in the Rule development process. The formal stakeholder group, which met 8 times over 2-1/2 years. Numerous public meetings about nutrients and possible nutrient regulations have been conducted, including six public meetings around the state that were focused on the proposed TBPEL Rule. Numerous work meetings and Water Quality Board meetings have been conducted in public to inform Utahns and affected businesses about the Division's nutrient strategy. Nevertheless, it was not anticipated that industry would be affected by this rule. When it was discovered that some industrial dischargers may be affected, changes were made to the rule to provide for variances for elements of the rule for those that have no reasonable potential to discharge phosphorus to surface waters. Additionally, the date when monitoring for nitrogen and phosphorus will be required has been pushed back until July 1, 2015 to allow for variances to be secured, if appropriate. Further, permittees have until January 1, 2018 to demonstrate that the TBPEL for phosphorus is unnecessary.
D1-B	Pacific States Cast Iron Pipe Company	PSCIPCO acknowledges that nutrients and TDS are among the top problems regarding surface waters of the state and the Utah Division of Water Quality (DWQ) is tasked with improving water quality to achieve desired and established standards. However, DWQ did not fully evaluate the impacts imposing such regulations may produce by not assessing the science or costs of nutrient reduction technologies for industry. DWQ focused its efforts on publically owned treatment works (POTWs) and established technology-based limits for phosphorus considering only people, households, and agriculture.	The Division believes that with few exceptions, industry will be largely unaffected by the proposed rule because most industries in the state discharge to POTWs or already discharge low levels of nitrogen and phosphorus. As with the POTWs, most industries with nutrients present in their wastewater already have treatment works that can be economically adapted, e.g., with chemical addition, to meet the proposed phosphorus limit.
D1-C	Pacific States Cast Iron Pipe Company	PSCIPCO concedes that DWQ has proposed a method of granting variances to facilities (of all types and in all categories), but that these variances are in lieu of preferred exemptions, limited and presume that POTW-focused, technology-based limits should apply to industries even though technology-based limits were never established for direct industrial discharges.	The proposed technology-based limits are reasonable, and consistent with industry-wide standards. The same technologies can be used for industrial treatment of phosphorus as for POTWs.

D2	Pacific States Cast Iron Pipe Company	Industry involvement and inclusion have been last minute. PSCIPCO had been renewing their UPDES permit during the time frame for developing the proposed nutrient rule. This renewal period is the expected time to review applicable regulations and proposed rules and solicit input from affected parties of how to achieve any identified standards. PSCIPCO was not informed of any new regulations which might impact their UPDES permit. In addition, PSCIPCO performed an anti-degradation review (ADR) concerning the installation and addition of cooling towers to their permit and there was neither review nor request concerning nutrients during the renewal process. In fact, PSCIPCO was not directly notified of the applicability of this potential rule until October 14th.	The proposed rule has an extended schedule for implemention, beginning with monitoring that will establish the applicability of allowed variances, followed by implemention of technologies for phosphorus treatment, when necessary.
D3	Pacific States Cast Iron Pipe Company	Clarification needs to occur regarding phosphorus in intake water. PSCIPCO previously stated that it uses once-through, non-contact cooling system water in its process. PSCIPCO pulls surface water from the Ironton Canal and returns this water slightly upstream from where was it diverted for the cooling process. In such a case, PSCIPCO may receive water that has elevated amounts of nutrients due to agricultural or stormwater run-off that were beyond PSCIPCO's control and then exceed the standard by merely passing the water through the facilities cooling system. PSCIPCO recommends investigating and developing direct industrial discharge standards and a methodology for separating a facility's contribution from background.	Dischargers are not required to treat background pollutants per R317-1-3.4 Pollutants in Diverted Water
D4	Pacific States Cast Iron Pipe Company	The rule is too general regarding required nutrient monitoring. The proposed rule states that all discharging treatment works that has "reasonable potential to discharge nitrogen or phosphorus" are required to institute nutrient monitoring practices for influent and effluent waters. It also makes the provision that they "shall be self-implementing beginning January 1, 2015." DWQ is to take the lead in evaluating the need to include or apply additional standards, particularly regarding a "reasonable potential" as per this proposed rule and not the permittee. This evaluation should be addressed as part of the permitting process, or if necessary, use the reopener provision in an existing permit.	The requirement that the discharger demonstrate no reasonable potential was revised in Change in Proposed Rule #2: R317-1-3.3.D.2 The Director may authorize a variance to the monitoring requirements identified in Subsection R317-1-3.3.D.1.
D5	Pacific States Cast Iron Pipe Company	The proposed rule did not include an economic impact analysis regarding industries current use of phosphate containing compounds in boiler and cooling tower waters. As stated above PSCIPCO uses cooling towers. Cooling towers and boilers utilize phosphate compounds as an essential component to both corrosion and deposition control. Without the input of industry into the proposed rule, the economic costs associated with any potential restriction or change of these conditioning compounds have not been considered or evaluated.	We agree that there will be cases where water treatment chemicals need to be considered for nutrient reduction. Most of these cases will be resolved through chemical optimization or replacement. Industrial chemistry for replacement of phosphates used for chemical sequestering is well established and economical; however, an economic hardship variance is available for cases where replacement is not feasible.
D6	Pacific States Cast Iron Pipe Company	PSCIPCO recognizes DWQ's and the current workgroups' efforts in developing the proposed rule. It is hopeful that additional nutrient management options may developed when this work includes all stakeholders in the process.	Innovative management approaches are encouraged. R317-1-3.3.C.1.d provides that if the owner of the discharging treatment works can demonstrate that a commensurate phosphorus reduction can be achieved in receiving waters using innovative alternative approaches such as water quality trading, seasonal offsets, effluent reuse, or land application, a variance to the TBPEL will be allowed.

E1	Salt Lake City Corp.	As a steward of the environment, Salt Lake City has and will continue to work closely with the UDWQ and other interested stakeholders on workgroups, projects, and initiatives to best protect the water quality of the Waters of the State. The City continues to support the development of a Nutrient Strategy for the Waters of the State that should include a science-based approach to development of nutrient limits that are appropriate and tailored for each water body or water body classification. As an example, there are many unknowns and uncertainties regarding the scientific research and the Great Salt Lake. The *Utah Nutrient Strategy: 'Technology Limits* prepared by UDWQ in support of the TBL expressly notes "[i]t is likely that years of additional research will be needed before defensible conclusions about appropriately protective Great Salt Lake nutrient limits, if any, can be made. (Page 3)." Therefore, the City requests that further studies and evaluations be performed by the State prior to imposition of TBLs.	Technology-based limits are an interim measure imposed to prevent further deterioration (due to growth and resulting increases in waste discharges) of the state's limited water resources while the science needed to establish regional and site-specific water quality standards is completed. National and international research on the effects of excess nutrients in the aquatic environments supports the need to control nutrients from point and non-point sources.
E2	Salt Lake City Corp.	The Proposed Rule refers to costs associated with implementation of upgrades to treatment facilities and the financial impact to Utah households. The UDWQ costs were adapted from the October 2010 Report "Statewide Nutrient Removal Cost Impact Study," prepared for UDWQ by CH2M-HILL. The City recently (October, 2014) conducted a thorough engineering technical and cost analysis for upgrades and modifications to our reclamation facility to meet the proposed TBLs for phosphorous (1 mg/L, proposed), total inorganic nitrogen (TIN 10 mg/L proposed by UDWQ heretofore for future rule), and ammonia (1.5 mg/L as based on EPA recommendations). The costs presented in a UDWQ 2010 report indicate that to meet the proposed TBL of 1 mg/L for total phosphorous, the City's reclamation facility would require approximately $2 Million in upgrades. Based on the City's 2014 detailed engineering study, utilizing the existing processes with the addition of chemical phosphorous removal would require approximately $75.7 Million in capital cost and $2.7 Million in annual operating costs, with a present value of approximately $120 Million.	In its study, "Statewide Nutrient Removal Cost Impact Study," the Division attempted to capture the increased cost to POTWs from the proposed nutrient rule only, but recognized that additional costs will be incurred by POTWs to accommodate additional growth beyond current capacities as well as to address aging infrastructure and technology limitations associated with older plants. The Division appreciates that Salt Lake City Corp. has taken the next step toward an integrated assessment of all of its future wastewater treatment needs and we agree, and pointed out in our report, that Salt Lake City will have additional costs to address basic capacity and infrastructure needs. Neither a technology-based effluent limit for nitrogen nor more stringent ammonia criteria is part of the proposed TBPEL rule, so the costs associated with implementing those two elements have not been considered. We believe that the costs for needed and future infrastructure improvements at the Salt Lake City Reclamation Facility plus the cost of nutrient removal will be affordable. If Salt Lake City Corp. believes that's not the case, the proposed rule provides for a variance for economic hardship.
E3	Salt Lake City Corp.	This is a considerable discrepancy from the UDWQ estimate of $2M to the detailed estimated impact of $120M, a 60-fold increase. The chemical addition for phosphorous removal creates additional precipitate solids, which require significant expansion of several other processes to remove those solids. The City's total costs necessary to meet the 1mg/L criteria for phosphorous include: rehabilitation/upgrade of the existing trickling filters and pump station; additional primary and secondary clarifiers; and new chemical feed and storage, ultraviolet disinfection, and solids de-watering facilities.	We support Salt Lake City's plans to upgrade and modernize its wastewater treatment plant but we disagree that the City's higher costs are due solely to the proposed nutrient regulation. Most of these costs are for future capacity and replacement of old facilities.

E4	Salt Lake City Corp.	If subsequent phases of the nutrient strategy (reduction of TIN and/or ammonia) also are implemented, then this $120 Million chemical addition investment would be largely rendered obsolete and largely a lost cost, as the plant would have to switch processes and construct an entirely new biological nutrient removal process to meet the TIN and ammonia criteria, and meet any further restrictive phosphorus limits (i.e. 0.1 mg/l), A biological treatment process that would effectively reduce total phosphorous,' TIN, and ammonia to the proposed levels is estimated to have $176.9 Million in capital cost and $3.4 Million in annual operating costs, with a present value of approximately $235 Million.	In planning for infrastructure to meet the proposed TBPEL, Salt Lake City Corp. would be well-advised to take into account the possibility of there being more stringent ammonia toxicity effluent limits imposed on its facility in the future. Similarly, more stringent effluent limits could become necessary for Total Inorganic Nitrogen. The Division expects that as part of its Nutrient Strategy, the question of how TBPEL will be applied to Great Salt Lake discharges will be fully vetted with Salt Lake City and other stakeholders to address the more complicated case of the nitrogen cycle in GSL.
E5	Salt Lake City Corp.	Environmental Impact of TBL Rule. The City's utilized a Triple Bottom Line analysis when assessing our processes and the proposed nutrient reduction criteria. The triple-bottom line analysis includes assessment of the financial, social, and environmental costs/impacts that would result from implementation of only a chemical phosphorous reduction and from implementation of biological processes that would address phosphorous, TIN, and ammonia. The Salt Lake City Reclamation Facility would see an increase of power consumption of 8.5 million kilowatt hours (kWh) and 32.8 million kWh for chemical phosphorous removal and biological nutrient removal, respectively. For each alternative, the facility would see an increase in weekly truck delivery of 8 semi trucks and 4,150 gallons per day usage for chemical phosphorous removal and 3 semi trucks and 1,640 gallons per day for biological nutrient removal. The TBL ignores the known significant greenhouse gas (GHG) footprint impact to an area with known air quality concerns.	The Division's "Statewide Nutrient Removal Cost Impact Study" addressed the issues if increased power consumption, sludge production, hauling and air pollution. We appreciate the City's consideration as well. We estimated that emissions will increase by generally less than 10 percentas a result of increased nutrient removal.
E6	Salt Lake City Corp.	Nutrients are essential to support the ecology and economy of the lake, and to date potential impacts of nutrient reduction has not been determined relative to the vast avian population, as well the $IB annual brine shrimp industry. The significant investment to meet the TBL does not assure improvement in Great Salt Lake water quality or ecosystem, but will assuredly have a social, financial and environmental impact.	Technology-based limits are an interim measure imposed to prevent further deterioration (in response to growth and resulting increases in waste discharges) of the state's limited water resources while the science needed to establish regional and site-specific water quality standards is completed. National and international research on the effects of excess nutrients in the aquatic environments supports the need to control nutrients from point and non-point sources.
E7	Salt Lake City Corp.	In summary, the City recommends that the UDWQ complete further detailed study and understanding of the Great Salt Lake nutrient regime prior to imposition of technology-based limits. The City will incur significant future financial costs to reduce phosphorous alone ($120 Million in present value) or to reduce phosphorous, TIN, and ammonia ($235 Million in present value). The known and unknown social and environmental impacts of these TBL regulations could be significant. The city will continue to support the UDWQ to establish the most appropriate science-based nutrient limits for the Waters of the State and looks forward to continued collaboration with UDWQ and other stakeholders.	The Division of Water Quality continues to investigate the impacts of excessive and increasing nutrients in Great Salt Lake (GSL). There is much science and study that must occur before effluent limits for nitrogen are considered for facilities that discharge to that water body. That is because nitrogen-fixing bacteria may convert nitrogen gas into ammonium or nitrate independent of the amount of nitrogen discharged to GSL by POTWs. There is much less debate about curtailing phosphorus levels in GSL as absent steps being taken to reduce phosphrous, its levels will continue to increase in both the GSL water column and sediment.

R317. Environmental Quality, Water Quality.
R317-1. Definitions and General Requirements.
R317-1-3. Requirements for Waste Discharges.

3.1 Compliance With Water Quality Standards.

All persons discharging wastes into any of the waters of the State shall provide the degree of wastewater treatment determined necessary to insure compliance with the requirements of Rule R317-2 Water Quality Standards, except that the Director may waive compliance with these requirements for specific criteria listed in Rule R317-2 where it is determined that the designated use is not being impaired or significant use improvement would not occur or where there is a reasonable question as to the validity of a specific criterion or for other valid reasons as determined by the Director.

3.2 Compliance With Secondary Treatment Requirements.

All persons discharging wastes from point sources into any of the waters of the State shall provide treatment processes which will produce secondary effluent meeting or exceeding the following effluent quality standards.

A. The arithmetic mean of BOD values determined on effluent samples collected during any 30-day period shall not exceed 25 mg/l, nor shall the arithmetic mean exceed 35 mg/l during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the BOD values of effluent samples shall not be greater than 15% of the BOD values of influent samples collected in the same time period. As an alternative, if agreed to by the person discharging wastes, the following effluent quality standard may be established as a requirement of the discharge permit and must be met: The arithmetic mean of CBOD values determined on effluent samples collected during any 30-day period shall not exceed 20 mg/l nor shall the arithmetic mean exceed 30 mg/l during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the CBOD values of effluent samples shall not be greater than 15% of the CBOD values of influent samples collected in the same time period.

B. The arithmetic mean of SS values determined on effluent samples collected during any 30-day period shall not exceed 25 mg/l, nor shall the arithmetic mean exceed 35 mg/l during any 7-day period. In addition, if the treatment plant influent is of domestic or municipal sewage origin, the SS values of effluent samples shall not be greater than 15% of the SS values of influent samples collected in the same time period.

C. The geometric mean of total coliform and fecal coliform bacteria in effluent samples collected during any 30-day period shall not exceed either 2000 per 100 ml or 200 per 100 ml respectively, nor shall the geometric mean exceed 2500 per 100 ml or 250 per 100 ml respectively, during any 7-day period; or, the geometric mean of E. coli bacteria in effluent samples collected during any 30-day period shall not exceed 126 per 100 ml nor shall the geometric mean exceed 158 per 100 ml respectively during any 7-day period. Exceptions to this requirement may be allowed by the Director where domestic wastewater is not a part of the effluent and where water quality standards are not violated.

D. The effluent values for pH shall be maintained within the limits of 6.5 and 9.0.

E. Exceptions to the 85% removal requirements may be allowed where infiltration makes such removal requirements infeasible and where water quality standards are not violated.

F. The Director may allow exceptions to the requirements of Subsections R317-1-3.2.A, R317-1-3.2.B, and R317-1-3.2.D where the discharge will be of short duration and where there will be no significant detrimental effect on receiving water quality or downstream beneficial uses.

G. The Director may allow that the BOD5 and TSS effluent concentrations for discharging domestic wastewater lagoons shall not exceed 45 mg/l for a monthly average nor 65 mg/l for a weekly average provided the following criteria are met:

1. the lagoon system is operating within the organic and hydraulic design capacity established by Rule R317-3;

2. the lagoon system is being properly operated and maintained;

3. the treatment system is meeting all other permit limits;

4. there are no significant or categorical industrial users (IU) defined by 40 CFR Part 403, unless it is demonstrated to the satisfaction of the Director that the IU is not contributing constituents in concentrations or quantities likely to significantly affect the treatment works; and

5. a Waste Load Allocation (WLA) indicates that the increased permit limits would not impair beneficial uses of the receiving stream.

3.3 Technology-based Limits for Controlling Phosphorus Pollution.

A. Technology-based Phosphorus Effluent Limits (TBPEL)

1. All non-lagoon treatment works discharging wastewater to surface waters of the state shall provide treatment processes which will produce effluent less than or equal to an annual mean of 1.0 mg/L for total phosphorus.

2. The TBPEL shall be achieved by January 1, 2020.

B. Discharging Lagoons -Phosphorus Loading Cap

1. No TBPEL will be instituted for discharging treatment lagoons. Instead, each discharging lagoon will be evaluated to determine the current annual average total phosphorus load based on average flows and concentrations. Absent field data to determine these loads, they will be estimated by the Division.

2. A cap of 125% times the current average annual total phosphorus load will be established and referred to as phosphorus loading cap. Once the lagoon's phosphorus loading caphas been reached, the owner of the facility will have five years to construct treatment processes or implement treatment alternatives to prevent the total phosphorus loading cap from being exceeded.

C. Variances for TBPEL and Phosphorus Loading Caps

1. The Director may authorize a variance to the TBPEL or phosphorus loading cap under any of the following conditions:

a. Where an existing TMDL has allocated a total phosphorus wasteload to a treatment works, no TBPEL or phosphorus loading cap, as applicable, will be applied.

b. If the owner of a discharging treatment works can demonstrate that imposing the TBPEL or phosphorus loading cap would result in an economic hardship, an alternative TBPEL or phosphorus loading cap that would not cause economic hardship may be applied. "Economic hardship" for a publicly owned treatment works is defined as sewer service costs that, as a result of implementing a TBPEL or phosphorus loading cap, would be greater than 1.4% of the median adjusted gross household income of the service area based on the latest information compiled by the Utah State Tax Commission, after inclusion of grants, loans, or other funding made available by the Utah Water Quality Board or other sources. The Director will consider other demonstrations of economic hardship on a case-by-case basis.

c. If the owner of a discharging treatment works can demonstrate that the TBPEL or phosphorus loading cap are clearly unnecessary to protect waters downstream from the point of discharge, no TBPEL or phosphorus loading cap will be applied.

d. If the owner of the discharging treatment works can demonstrate that a commensurate phosphorus reduction can be achieved in receiving waters using innovative alternative approaches such as water quality trading, seasonal offsets, effluent reuse, or land application.

2. All variances to TBPEL and phosphorus loading caps shall be revisited periodically to determine if the rationale used to justify the conditions in Subsection R317-1-3.3.C remains applicable.

3. For treatment works required to implement TBPEL or a phosphorus loading cap, the demonstration under Subsection R317-1-3.3.C must be made by January 1, 2018. Unless this demonstration is made, the owner of the discharging treatment works must proceed to implement the TBPEL or phosphorus loading cap, as applicable, in accordance with, respectively, Subsections R317-1-3.3.A and R317-1-3.3.B.

D. Monitoring

1. All discharging treatment works are required to implement, at a minimum, monthly monitoring of:

a. influent for total phosphorus (as P) and total Kjeldahl nitrogen (as N) concentrations; and

b. effluent for total phosphorus and orthophosphate (as P), and ammonia, nitrate-nitrite, and total Kjeldahl nitrogen (as N).

2. The Director may authorize a variance to the monitoring requirements identified in Subsection R317-1-3.3.D.1.

3. All monitoring under Subsection R317-1-3.3.D shall be based on 24-hour composite samples by use of an automatic sampler or minimum of four grab samples collected a minimum of two hours apart.

4. These monitoring requirements shall be self-implementing beginning July 1, 2015.

3.4 Pollutants In Diverted Water Returned To Stream.

A user of surface water diverted from waters of the State will not be required to remove any pollutants which such user has not added before returning the diverted flow to the original watercourse, provided there is no increase in concentration of pollutants in the diverted water. Should the pollutant constituent concentration of the intake surface waters to a facility exceed the effluent limitations for such facility under a federal National Pollutant Discharge Elimination System permit or a permit issued pursuant to State authority, then the effluent limitations shall become equal to the constituent concentrations in the intake surface waters of such facility. This section does not apply to irrigation return flow.

KEY: water pollution, waste disposal, nutrient limits, effluent standards
Date of Enactment or Last Substantive Amendment: 2014
Notice of Continuation: October 2, 2012
Authorizing, and Implemented or Interpreted Law: 19-5

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MEMORANDUM

TO: Water Quality Board

THROUGH: Walter L. Baker, P.E.

FROM: Toby Hooker

DATE: December 8, 2014

SUBJECT: 401 Water Quality Certification Process

Section 401 of the Clean Water Act (CWA) requires that any applicant for a federal permit or license to conduct an activity that will or may discharge into waters of the United States must present the federal authority with a 401 Water Quality Certification from the appropriate state agency. The purpose of Certification is to ensure that the federally permitted or licensed activities will be conducted in a manner that will comply with applicable discharges and water quality requirements in order to maintain the chemical, physical, and biological integrity of the State's waters.

The Utah Division of Water Quality has executed a 401 Water Quality Certification process since receiving delegation from EPA. In May 2013 Utah Water Quality rule R317-15, enclosed, was established to help define the procedures for submitting and processing State Water Quality Certifications pursuant to Section 401 of the federal Clean Water Act, 33 U.S.C. Sections 1251 to 1387 and consistent with the Utah Water Quality Act. Today's workgroup discussion will examine this process through the review of two current 401 projects: Millsite Reservoir and Union Pacific Railroad Causeway.

Attachment 1: Utah's Water Quality Certification (R317-15)

195 North 1460 West • Salt Lake City, UT
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R317. Environmental Quality, Water Quality.
R317-15. Water Quality Certification.
R317-15-1. Purpose.

This rule establishes procedures for applying for and processing State Water Quality Certification pursuant to Section 401 of the federal Clean Water Act, 33 U.S.C. Sections 1251 through 1387 and consistent with the Utah Water Quality Act, Title 19, Chapter 5. The purpose of Certification is to ensure that the federally permitted or licensed activities will be conducted in a manner that will comply with applicable discharge and water quality requirements in order to maintain the chemical, physical, and biological integrity of waters of the United States within the State.

R317-15-2. Definitions.

In addition to the general definitions in Section R317-1-1, the following definitions apply for purposes of this Rule R317-15 only:

"Applicable discharge and water quality requirements" mean requirements in the Utah Water Quality Act, Utah Code Ann. Title 19, Chapter 5, and rules made thereunder that are equivalent to the requirements of 33 U.S.C. Sections 1311, 1312, 1313, 1316 and 1317 and regulations promulgated thereunder.

"Applicant" means a person who applies for a license or permit issued by an agency of the federal government to conduct an activity that is subject to Certification under Section 401.

"Blanket Certification" or "Blanket" means an exemption from the requirement to obtain an individual Water Quality Certification for certain activities deemed insignificant effect on water quality and may be issued to Section 404 nationwide or regional general permits.

"Licensing or permit agency" means an agency of the federal government to which application is made for a license or permit that is subject to Certification.

"Section 401" means Section 401 of the federal Clean Water Act, 33 U.S.C. Sections 1251 to 1387.

"State Water Quality Certification" or "Certification" means Certification by the director under Section 401 that a proposed discharge will comply with applicable discharge and water quality requirements. A Certification may be a Blanket or individual Certification that may contain conditions.

R317-15-3. Applicability.

3.1. Rule R317-15 applies to any applicant for a federal permit or license that is subject to the requirements of Section 401. Federal permits and licenses most frequently subject to Certification in Utah include the following:

A. permits from the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act, 33 U.S.C. Sections 1251 through 1387; and

B. licenses from the Federal Energy Regulatory Commission under the Federal Powers Act, 16 U.S.C. Section 1791, et seq.

This is not a complete list of federal permits or licenses requiring Certification.

3.2. Certification is required for activities under Section 404 of the federal Clean Water Act, 33 U.S.C. Section 1344. Sections

404 requires approval for the discharge of dredged or fill materials into water of the United States. However, there are certain activities that are ordinarily exempt from Section 404 requirements, and which will not therefore require Certification under this Rule R317-15. Those activities include the discharge of dredge or fill material: from normal farming and ranching activities; from the construction or maintenance of farm or stock ponds or irrigation ditches; from the maintenance of drainage ditches; and from the construction or maintenance of farm roads. See Section 404(f), 33 U.S.C. Section 1344(f) for a complete list of exempt activities.

3.3. A Certification will ordinarily include conditions necessary to comply with the requirements of the Utah Water Quality Act, Title 19, Chapter 5, and rules made under that Act. However, nothing in this rule or a Certification exempts a person from compliance with the Act, or rules made under that Act.

R317-15-4. Application Provisions.

4.1. Unless otherwise determined by the director, the application for Certification shall include the following complete information and documentation:

A. application date;

B. name and address of the applicant;

C. signature of the applicant. A corporate application must be signed by an officer of the corporation. Any signature required for application for Certification shall be provided as described in 40 CFR Section 122.22(a);

D. name, address, email address and phone number of a contact for the application, e.g., the person to whom requests for additional information should be addressed;

E. list of names and address of landowners adjacent to the project site;

F. plan or drawings that include a plan view, cross section view, and elevation view;

G. associated existing or pending federal, state, and local permits, including land use permits, with corresponding file numbers;

H. for proposed discharges:

1. name(s) of the waters where the discharge may occur;

2. precise latitude and longitude of the discharge location(s) to 5th decimal place in decimal degrees and to the tenth of a degree in degrees-minutes-seconds notation;

3. beneficial use classifications of potentially affected surface waters (see Section R317-2-13); and

4. list any known causes of water impairment per Sections 303(d) and 314 of the federal Clean Water Act, 33 U.S.C. Sections 1251 through 1387 and the names of any associated local watershed management plans including TMDL studies;

I. a description of the overall project including the construction and operation of the facilities which may result in discharge. Characterize the physical, chemical, biological, thermal and other pertinent properties of the discharge;

J. a description on how the discharges are compliant with water quality standards of the receiving water including anti-degradation requirements, beneficial use designations, narrative standards and numeric criteria;

K. a description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge and the operation of the equipment or facilities employed in control of the proposed discharge. Provide a map showing the location(s) of the monitoring point(s);

L. supporting documentation submitted to federal agencies (e.g., maps, plans, specifications, project dimensions, copies of associated federal applications, biological and engineering studies, reference information in FERC filings, Environmental Assessment or Environmental Impact Statements, Alternative Analyses), as applicable;

M. an exhibit that identifies and describes other requirements of State law applicable to the activity that have any relationship to water quality, including requirements under:

1. Section 19-5-114, spills or discharges of oil or other substance;

2. Section R317-2-12, Category 1 and Category 2 waters;

3. Section R317-2-3 Antidegradation Policy (ADR);

4. Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities Permit No. UTR300000; and

5. UPDES General Permit for Construction Dewatering Permit No. UTG070000.

N. estimated dates on which the activity will begin and end and the date or dates on which the discharge(s) will take place;

O. additional information regarding any unique features of the project;

P. any additional information as required by the director.

4.2. If any information required by 4.1 is expected to be developed in the course of the federal application process, the applicant shall include a statement to that effect, and shall provide the information when it is submitted to the federal permitting or licensing agency.

4.3. The director may prescribe a form for application for a Certification.

4.4. If an application for Certification is incomplete or is otherwise deficient, the applicant will be notified and will be given a deadline for the submittal of such information. If the information is not submitted timely and is necessary for reaching a Certification decision, the Certification process will be suspended pending the development of additional information.

4.5. The owner or its duly authorized representative shall notify the director in writing of changes which may affect the application for Certification and Certification process.

4.6. The applicant shall pay any applicable application fees to the "Utah Division of Water Quality." Contact the Division for further information about the application fee. The application fee is not refundable or transferable to a separate application.

4.7. An application for Certification shall be made simultaneously with the application to the federal licensing or permit agency. If application is not made in accordance with this requirement, there may be delays and additional fees to allow the collection and consideration of all pertinent information.

R317-15-5. Public Notice and Public Hearing.

5.1. The director's draft Certification shall be subject to a public notice and comment period. The comment period shall ordinarily be 30 days, but may be lengthened or shortened for good cause. For example:

A. the period may be shortened if the application is of a type that is routinely granted;

B. the period may be shortened if the impacts of the proposed activity are minor;

C. the period may be shortened if the period for issuing a Certification is shortened by the federal licensing or permitting agency; or

D. the period may be lengthened for a major activity.

5.2. Every five years the USACE advertises the re-evaluation of the general permits under Section 404 of the Clean Water Act for reissuance with a public notice in the Federal Register. At that time, the Division is given the opportunity to reevaluate State requirements for Certification application, conditions and notification as well as how and if the general permits will be recertified with a Blanket Certification. Any general permit denied Blanket Certification during this period would require individual application to the Division for a project by project Certification.

The director then issues a 30-day public notice announcing which general permits will receive Certification and their requirements for the next five years. In an effort to support the streamlined process of the Corps' general permit program, the Division will not hold a project specific Certification public notice for individual activities authorized by the Corps under the general permits during the subsequent five years unless the Division declined to certify specific general permits during the re-evaluation process.

5.3. When practicable, the public notice and comment period and any public hearing for a draft Certification will ordinarily be held jointly with federal agencies that are licensing or permitting the proposed activity.

5.4. If the certification is not public noticed by the federal agency the Division will publish the public notice by one or more of the following methods:

A. Utah Department of Environmental Quality website; or

B. any other means selected by the director that will effectively solicit input from stakeholders representing State and federal agencies, interests groups, and the general public.

5.5. The director may, at the director's discretion, hold a public hearing to take oral comments.

R317-15-6. Director's Decision.

6.1. Although the evaluation process may vary on a site-specific basis, the director, in determining whether a proposed discharge complies with applicable discharge and water quality requirements, will ordinarily consider in the evaluation process whether a proposed discharge:

A. prevents or interferes with the attainment or maintenance of applicable water quality standards in Section R317-2 including:

1. impairs the designated beneficial use classifications (e.g., aquatic life, drinking water, recreation) in Section R317-2-6;

2. exceeds water quality criteria, either narrative or numeric, in Section R317-2-7;

3. fails to meet the antidegradation (ADR) requirements of Section R317-2-3;

B. causes a violation of the Utah Water Quality Act, Title 19, Chapter 5;

C. are inconsistent with wasteloads and permitted load allocations in listed TMDLs in Section R317-1-7;

D. causes an exceedence of effluent limitations or control regulations applicable under Rule R317-8; or

E. otherwise causes a failure of compliance with applicable discharge and water quality requirements.

6.2. In considering whether there will be a discharge or whether any discharge will comply with applicable discharge and water quality requirements, the director may also consider whether the applicant is currently in significant noncompliance of the terms and conditions of any previously issued Certification for another project or activity, and may deny Certification based on the existence of any such outstanding significant noncompliance.

6.3. After review of the application for Certification the director will either:

A. issue a Certification;

B. issue a Certification with specific conditions that must be met in order for the applicant to be in compliance with applicable law;

C. deny the Certification and include reasons for denial; or

D. waive Certification if the director finds that the activity will:

1. cause minimal or no impacts to the quality of State waters; or

2. have a temporary and limited effect on water quality, as provided in Subsection R317-2-3.5.b.4.

6.4. If a person who is required to obtain a Certification fails to do so, the director may, at his discretion, process an application for Certification after-the-fact. An application for an after-the-fact Certifications will be reviewed under the same standards as timely application for Certification. The director may require restoration, other actions, or both, as a condition of Certification. An after-the-fact applicant shall have the burden of proving what the original baseline conditions were, and a Certification may be denied in the absence of such proof. After-the-fact Certifications will not have retroactive effect. Enforcement action may be taken for failure to obtain a Certification even if a person obtains an after-the-fact permit or license from the federal agency.

6.5. A Certification is a Permit Order and may be challenged as provided in Section 19-1-301.5 and R305-7. A recipient of a Certification shall comply with all conditions of the Certification; any noncompliance is a violation of these rules and is grounds for enforcement action.

R317-15-7. Enforcement.

A Certification shall be considered an order under the Utah Water Quality Act.

R317-15-8. Transfer.

8.1. The applicant shall give written notice to the director of any transfer of the Certification, within 30 days after the transfer.

8.2. The notice shall include a written agreement between the existing and new applicant establishing a specific date for transfer of Certification responsibility, coverage and liability.

KEY: Water Quality Certification, Section 401, 401 Certification, Clean Water Act
Date of Enactment or Last Substantive Amendment: August 19, 2013
Authorizing, and Implemented or Interpreted Law: 19-5; 33 U.S.C. 1251-1387

UTAH WATER QUALITY BOARD MEETINGS - 2015

DATE	CITY	PLACE/TIME
Wed. January 28, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. February 25, 2015	Salt Lake City	DEQBuilding – Room 1015 @ 9:30
Wed. March 25, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. April 29, 2015	St. George Utah	**Dixie Conv Ctr – WEAU Conf - (Neither state plane was available as of July 8, 2014/call 2 wks prior to mtg to see if one is available)**
Wed. May 27, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. June 24, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. Aug. 26, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. September 23, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30
Wed. October 28, 2015	Salt Lake City	DEQ Building – Room 1015 @ 9:30

15wqbmtgs.doc Revised 12/09/14

Deseret News

Upcoming conference to discuss future of Weber River

Deseret News
Published: Wednesday, Nov. 5 2014 11:48 a.m. MST

Mike Clemmer of Farmington fishes on the Weber River, Monday, July 1, 2013. (Ravell Call, Deseret News)

OGDEN — The challenges and opportunities facing the Weber River and its surrounding watershed will be discussed during a conference in Ogden Nov. 17-18. Anyone who has an interest in the the river and its watershed is encouraged to attend.

The inaugural Weber River watershed symposium, called Confluence 2014, will bring competing interests together to discuss problems and find collaborative solutions.

Ogden Mayor Mike Caldwell will give the keynote address. Presenters and panelists include the heads of various Utah state government departments, and Alan Matheson, senior environmental adviser to Gov. Gary Herbert.

More about the conference, and registration forms are available at www.weberconfluence2014.eventbrite.com.

"We want to highlight and strengthen the recent partnerships we've built throughout the Weber River watershed and discuss ways that we can move forward together into the future," said Ben Nadolski, river restoration biologist for the Division of Wildlife Resources and one of the event's organizers. "We invite watershed professionals, local leaders and citizens who live, work and play in the area to attend so we can stimulate further conversations about the future of our watershed."

Utah water year off to a lackluster start

By Amy Joi O'Donoghue, Deseret News

Follow @amyjoi16

Published: Wednesday, Nov. 5 2014 12:55 p.m. MST
Updated: Thursday, Nov. 6 2014 6:34 a.m. MST

View 10 photos »

Snow falls in the mountains Sunday, Nov. 2, 2014, in Big Cottonwood Canyon.

Scott G Winterton, Deseret News

Summary

The first full month of the new water year that began Oct. 1 failed to deliver on precipitation, with the statewide average clocking in at just 20 percent. Many areas of the state, such as Tooele County, barely received any — 3 percent.

SALT LAKE CITY — Utah's unusually wet summer did not maintain any staying power into fall, with the state picking up just 20 percent of the average precipitation during the first full month of the new water year.

October turned out to be among the driest and warmest recorded at Salt Lake City International Airport, and some areas — such as Tooele County — received just 3 percent of average precipitation.

The good news, according to the latest Utah Water and Climate report released Wednesday, is that hydrologically speaking, the state is not in that bad of a condition — at least not yet.

Stream flows are near or above average, and soil moisture is well above average in northern and central Utah and nearly normal in southern Utah.

Those moisture-laden soils, according to the report by the U.S. Natural Resources Conservation Service, means they will be well-primed for runoff should the state get a healthy snowpack.

The other morsel of optimism contained in the Utah Snow Survey report is reservoir storage that is higher than last year due to the rainy late summer: 76 percent of capacity across the state.

"We are really pleasantly surprised at the rebound in our reservoir levels," said Randy Julander, Utah Snow Survey supervisor.

What You May Have Missed


40 percent of marrying Americans have already tied the knot at least once


Families have become the scapegoat of holiday movies — why?


What missing class in Kindergarten means for high school

Most Popular

In Utah Across Site

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"With these two critical components, it sets us up nicely. Hopefully we get a really good snow year this year because we are due," he said.

Water managers are hopeful that November, however, does not deliver a repeat performance of October when it comes to precipitation totals.

As the next few weeks bring the ski season closer to its normal launch the week of Thanksgiving, the basins are staring at accumulation totals that look like this:

- Bear River, 36 percent
- Ogden-Weber, 15 percent
- Provo-Jordan, 21 percent
- Tooele-Vernon, 3 percent
- Southwest Utah, 5 percent

Julander said having a bad October is not cause for undue concern — it really does not set the state back much — but it does mean the coming months need to deliver strong snow totals.

Following a 2010-11 snowpack accumulation season that saw snowpack at 145 percent of normal in the mountains east of Salt Lake City, the state plunged into drought for two consecutive years. Last year ended on "average," but water managers were hoping for more snow and rainfall to pump storage reservoirs even higher.

Utah's western desert remains in moderate to severe drought, as well as portions of southeastern Utah, according to the U.S. Drought Monitor.

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About the Author

Amy Joi O'Donoghue

Amy Joi O'Donoghue is the environmental reporter the Deseret News, specializing in coverage of issues that affect land, air, water and energy

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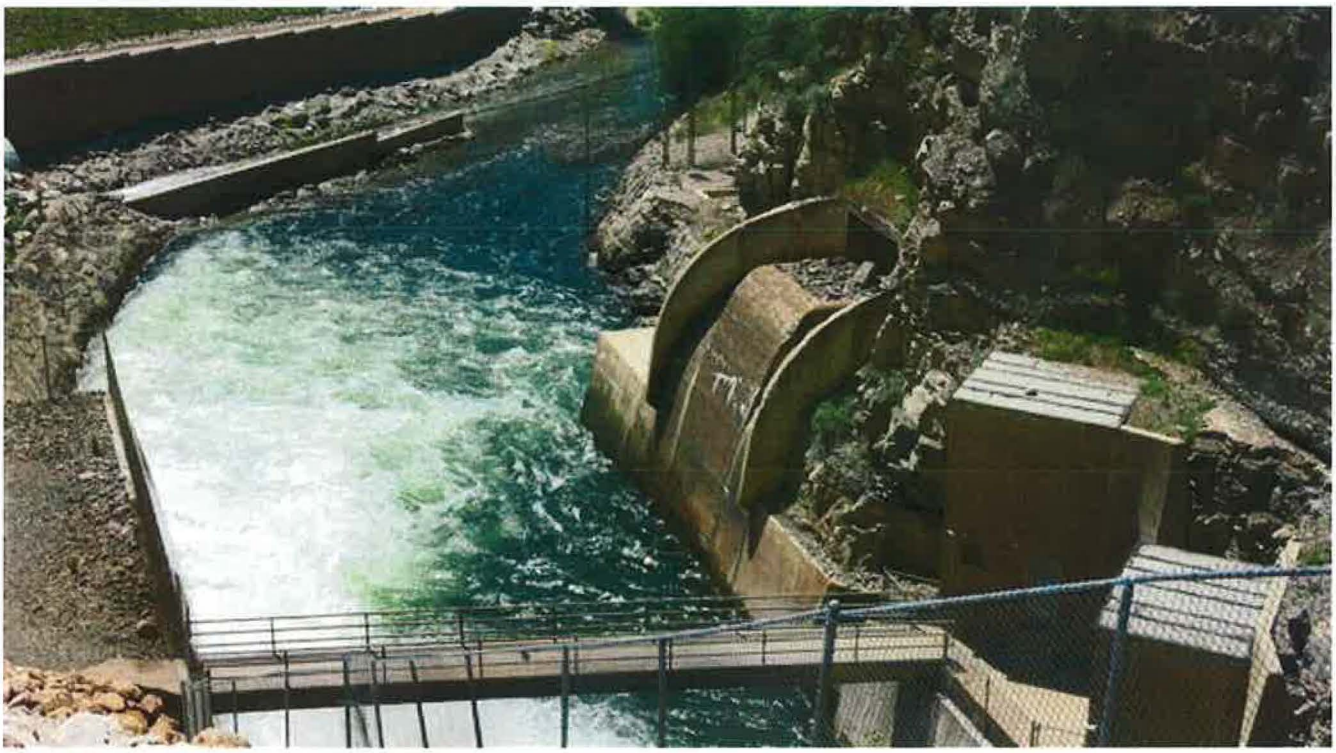
'We gotta start trusting': Tension... 52
Utah one of 17 states suing over... 47
Six sites now under consideration for... 29
Mayor says West Jordan 'not the place'... 26
Bill nullifying Obama's immigration... 25
Herbert unveils his version of Medicaid... 22
Warrant: Meth residue found in BYU meth... 21
Final report shows Mia Love raised more... 21

State requires Summit to conduct aquifer test

FRIDAY , NOVEMBER 07, 2014 - 4:39 PM



"Pictured is the spillway at the west end of Pineview Resevoir. Ogden City uses the reservoir and...

By CATHY MCKITRICK Standard-Examiner staff

EDEN — Since early April, a water exchange application for use of 400 acre feet of water in the new Hidden Lake Well near the top of Powder Mountain has stalled amid a flurry of concerns filed with Utah's Division of Water Rights.

An Oct. 29 letter from State Engineer Ken Jones to Summit Mountain Holding Group, LLC — the real estate development arm for Summit, the collective that purchased the 10,000-acre mountain in 2013 — cited Utah law stating that a water exchange may only occur if the withdrawal does not interfere with the rights of others.

"Given the geologic complexity and legitimate concerns of water users in the area that could be impacted by this proposal, I believe further investigation would be prudent before making a decision on your application," Jones said in his letter.

Jones called for Summit to conduct a 14-day aquifer test and monitor specific springs and creeks during its duration.

Jones also cautioned that the timeframe for such a test will soon close for this season.

"We're trying to get the test to happen this fall during base flow times" — as opposed to springtime when snow melt causes high runoff, said Ross Hansen, the division's regional engineer for the Ogden and Weber rivers and the west desert regional office.

The test should determine whether operation of the Hidden Lake Well causes intereference with spring and creek flows on either the Weber County or Cache County sides of the mountain.

Summit's exchange application essentially asked for release of 400-acre feet of water from Pineview Reservoir to replenish the water taken by the well.

Summit actually owns the rights to 1,400 acre feet of water and has a development agreement in place with Weber County to erect up to 2,800 dwellings on 6,772 acres. The first phase includes 154 single-family homes, while later development could add hundreds of hotel rooms, apartments and condos.

Close to two dozen protesters filed concerns about the impact Summit's water draw could have on residents downstream, including Cache County Corporation, Ogden City Public Utilities, Pacificorp, Elkhorn LLC, the Bar B Ranch, Four Mile Ranch, Garden of Eden Ranch, Eden Water Works Company, Middle Fork Irrigation Company, Wolf Creek Irrigation Company, Wolf Creek Water and Sewer Improvement District, Green Hills Water Sewer District, Pineview West Water Company, South Cache Water Users, Wellsville East Field Irrigation Company and the Wellsville Mendon Conservation District.

According to Hansen, a house uses about one-half an acre foot of water per year for indoor domestic use — that figure does not include water used for outside landscaping or irrigation.

For Summit's part, Chief Operating Officer Paul Strange said they are more than happy to conduct the acquifer test.

"I think fundamentally that more data is better," Strange said. "But we wanted to make sure it was done in a way that provided data that everybody wanted."

At present, Summit is in the process of installing the costly pump hundreds of feet deep in the ground, a task it hopes to finish within 10 days.

"The challenges we've got is that the pump is not quite installed, and that needs to be done before the weather closes in," Strange said. "The second issue is having a meaningful test at a constant rate that provides the information that everybody needs."

An Oct. 31 letter to the Division from Jody Williams — an attorney with Holland & Hart who represents some of the protesters — urged the division to require a 14-day test at 180 gallons per minute. arguing that Summit's pump was designed to function at that rate.

"If pumping at 180 gpm cannot be sustained for the two-week period, the rate can be backed off as occurs in aquifer tests all the time," Williams said in his letter.

Summit's attorney, Steven Clyde of Clyde Snow & Sessions, also responded to the division in an Oct. 31 letter, requesting a 7-day aquifer test at 150 gallons per minute instead.

"The requested 180 gpm is close to the maximum pumping rate of the permanent pump and the well itself," Clyde said, "and will be difficult to hold constant for long periods of time, given the relatively low transmissivity of the aquifer, low efficiency of the well, high lift, sensitivity of the pumping water level to small changes in pumping rate, and the fact that the pump must deliver water to the tank."

Clyde added that the well's long-term average pumping rate under the division's standards will be considerably less than 150 gpm.

By phone Thursday, Strange said the pump is not designed to run at maximum capacity for extended periods of time.

"Running at top velocity could damage the pump and cause it to shut off and interrupt the test," Strange said. "At 150 (gpm), we'll get a more consistent test."

Following a Nov. 3 meeting with the various stakeholders, the division issued a modified scope of work for the required test, keeping its duration at 14 consecutive days and starting the pump rate at 150 gpm.

"If conditions in the well are such that the pump rate may be increased, or otherwise adjusted to still maintain integrity of the well, the pump rate shall be modified accordingly," the document said.

Springs and creeks to be monitored include Pizzle Spring 3, Lefty Spring, Geertsen Canyon Creek and two sites on the headwaters of Wellsville Creek in Cache County. Water levels in two wells will also be tracked. Data collection starts seven days before pumping begins and continues seven days after it concludes.

"We have not prejudged this application in any way, shape or form," Hansen said. "We need to let the process play out and gather all the information before making a decision."

For more information on Summit's water exchange application, go to waterrights.utah.gov/cgi-bin/docview.exe?Folder=35-12848 (/waterrights.utah.gov/cgi-bin/docview.exe?Folder=35-12848)

Contact reporter Cathy McKitrick at 801-625-4214 or cmckitrick@standard.net. Follow her on Twitter at @catmck.

Waterline break closes part of 9400 South in Sandy

The Salt Lake Tribune

First Published Nov 06 2014 10:12PM • Last Updated Nov 06 2014 10:12 pm

A waterline break on Thursday night caused Sandy city workers to close a section of 9400 South.

The street was closed from 1000 East to 1300 East while crews tried to determine the exact location of the break, Sgt. Dean Carriger of the Sandy Police Department said.

There was no estimate on how long the street will be closed.

U.S. water use at lowest levels in 45 years

By Amy Joi O'Donoghue, Deseret News

Published: Thursday, Nov. 6 2014 1:35 p.m. MST
Updated: Thursday, Nov. 6 2014 2:00 p.m. MST

U.S. water use in seven of nine categories is down and at levels not seen since 1965, including shifts in irrigation, public water supply use, thermoelectric power and certain industry. Only mining and aquaculture water use increased, significantly.

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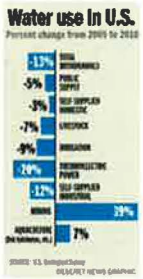
Summary

U.S. water use in seven of nine categories is down and at levels not seen since 1965, including shifts in irrigation, public water supply use, thermoelectric power and certain industry. Only mining and aquaculture water use increased, significantly.



SALT LAKE CITY — U.S. water withdrawals are at their lowest overall level in 45 years, experiencing signficant declines in the largest use areas like public water supply, irrigation, industry and thermoelectric power.

A report released this week by the U.S. Geological Survey said those categories experienced significant declines and that the 355 billion gallons of water used per day in the United States is at a consumptive level not seen since before 1970.

It means the country is developing ways to use water more efficiently and has improved conservation efforts.

Overall, that 2010 U.S. withdrawal is 13 percent less than in 2005, according to the report released Wednesday. Mining — which includes the oil and gas industry — experienced the most dramatic increase of 39 percent, while aquaculture ramped up 7 percent more than in 2005. Aquaculture includes fish hatcheries and farming of finfish and shellfish.

Across the country, 268 million people rely on a public water supply via water districts and other public delivery systems — or 86 percent of the population. The remainder rely on "self-supplied" systems that derive the majority of water used from springs and wells.

The report, "Estimated Water Use in the United States," represents the most comprehensive water-use data compiled by a federal agency and has been released every five years since 1950

every five years since 1950.

A number of factors are cited in the U.S. Department of Interior report that would lead to the substantial declines in large usage categories. The report points to the implementation of water saving measures in communities as the public and politicians become more savvy about conservation and increases in industrial reuse and recycling of wastewater.

While thermoelectric power and irrigation remained the two largest uses of water in 2010, both were notably less in 2010 than in 2005. Thermoelectric power water usage was 20 percent lover in that time period — dropping to a pre-1970 level ,and irrigation was 9 percent less in 2010 over 2005 and at the lowest volume since before 1965.

Thermoelectric power plants are using new cooling system technologies, are turning to natural gas over coal or have experienced closures, while farmland acreage is increasingly moving to sprinkler or micro-irrigation systems, the report said.

Public water supply withdrawals are down 5 percent (even though population was up 4 percent) between 2010 and 2005, and represent the first time since the five-year reporting began in 1950 that a decrease has been documented.

About 35 percent of all public water supply withdrawals came from the four states with the largest populations: California, New York, Florida and Texas. In total, 12 states accounted for 50 percent of all the withdrawals in the United States.

Even though mining use of water constituted the largest percentage of increase from 2005 to 2010 — 39 percent — the escalation of usage had minimal impact because it represents such a small percentage of the overall use, just 1 percent, according to the report.

The report shows Utah among the seven highest states for water withdrawals for mining in 2010 — at 250 million gallons per day, with 246 million gallons of that water derived from a saline supply, rather than freshwater.

Increased water usage in the mining category is reflective of the accelerated domestic oil and gas activity in the country. While freshwater withdrawals were only 1 percent less in 2010 than in 2005, saline water withdrawals were 97 percent more. The report notes that some of the increase in saline water usage is attributed to the increased accounting of water produced as a byproduct during oil and gas extraction and then reinjected for secondary oil and gas recovery.

Utah and Alaska, according to the report, accounted for 100 percent of the saline surface water withdrawals.

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Energy & Environment 3:56 PM WED NOVEMBER 12, 2014

UDAF Launches Environmental Stewardship Certification Program

By BRIAN GRIMMETT (/PEOPLE/BRIAN-GRIMMETT)

(http://mediad.publicbroadcasting.net/p/kuer/files/styles/x_large/public/20141l/162807972_d7743bd4d6_z.jpg)
Box Elder, Utah
Flickr: Lyza

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1:10

The Utah Department of Agriculture and Food (http://ag.utah.gov) is launching a new program that rewards farmers and ranchers who are working to protect the environment.

Jay Olsen is an environmental specialist for the Utah Department of Agriculture and Food. He says The Agricultural Certificate of Environmental Stewardship program (http://ag.utah.gov/home/news/491-aces-program-promotes-best-management-practices.html), or ACES, is designed to assist famers and ranchers in their efforts to put in place best practices to protect Utah's natural resources. He says it's also meant to help show the public the proactive approach the agricultural industry is taking with the environment.

"As our state grows and as our resources are taxed by more people and more needs and more diverse population base and the need for water and clean air and protected resources, that this is a program that can help that," he says. "We need to balance it

and remember that we need a farmer three times a day."

To obtain a certificate farmers and ranchers will need to go through a vigorous certification program that involves on-site visits by inspectors. Requirements for the ACES program can be found on the department's website at ag.utah.gov (http://ag.utah.gov).

TAGS: agriculture (/term/agriculture) farming (/term/farming) ranching (/term/ranching) environment (/term/environment) water quality (/term/water-quality)

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Glen Canyon Dam release may restore downstream areas, scientists say

November 12, 2014

PAGE, Ariz. — There is a low, rumbling sound that can be heard in Page, Arizona, this week.

The sound started Monday, will last until late Friday afternoon and thousands of people are coming to Page to see where the sound is coming from.

"It looks very peaceful," said Eva Fager, who is visiting the area from Sweden. "It's peaceful, huge and powerful."

The origin of the sound isn't a mystery.

It's coming from the Glen Canyon Dam, where engineers with the United States Bureau of Reclamation are releasing more water than usual as part of an experiment.

"It's gorgeous. Words can't describe the beauty," said Paul Drudge of nearby Church Wells, Utah.

Drudge and his wife made the short drive to the Glen Canyon Dam to see the four tubes releasing water into the Colorado River.

"We are seeing a few more people coming here," said Jason Tucker, the Glen Canyon Dam facility manager. "They'll call and say, 'I'd like to bring my family. I'd like to see that,' and there is a tour for them to go. It's unprecedented on the river to have this kind of flow."

When construction of the Glen Canyon Dam began in 1956 to store water and generate electricity, it affected the natural flow of the Colorado River through the area and into the Grand Canyon.

This "experimental high flow release" — the third of its kind in the past three years — is meant to kick up sand and sediment on the bottom of the river and move them downstream.

Scientists with the United States Geological Survey, and other agencies, believe the force from the water will rebuild sandbars, beaches, recreation areas and animal habitat that would have been part of the normal environment if Glen Canyon Dam was never built.

"I wouldn't judge whether that's responsible or not, but that it is that you have changed something," said Tucker. "Experiments like this are ways to find a meaningful way to restore or preserve that ecosystem downstream."

(Photo: Alex Cabrero/KSL TV)

Fifteen-thousand cubic feet of water per second is flowing out of the dam into the Colorado River.

To put that in perspective, a basketball is about one cubic foot. That means roughly 15,000 basketballs are being released out of the dam every single second.

"It's something that is very visually striking to see," said Tucker.

Tucker also says releasing this much water doesn't impact drought conditions.

"The same amount of water is going to be released from Glen Canyon Dam throughout the year, so since this is a higher flow period, obviously with the experiment that is here, that will be compensated for in other months where there will be less water that will go through the dam."

This is the third in a five-year plan to conduct experimental high flow releases.

USU students examine future of local waters

By Lis Stewart | Posted: Thursday, November 6, 2014 11:45 pm

What will Cache Valley's rivers, streams or groundwater look like in 30 years when the population has doubled? That depends on many things, and two Utah State University bioregional planning graduate students are considering the possibilities.

The graduate studio, Bioregional Analysis and Planning, is still in its early stages, but students Lyndi Perry and Aubrey Christensen have been working on understanding the issues surrounding the watershed in preparation for the recommendations they will send the Logan River Task Force this spring.

River Research

Lyndi Perry, left, and Aubrey Christensen stand along the bank of the Logan River near Rendezvous Park last Thursday afternoon as they talk about a watershed project they have been working on at Utah State University. (John Zsiray/Herald Journal)

Deseret News

Experimental high-flow release at Glen Canyon Dam may restore sediment, scientists say

By Alex Cabrero , Deseret News
Published: Thursday, Nov. 13 2014 4:15 p.m. MST

The Grand Canyon is intentionally being flooded from the Glen Canyon dam to re-distribute sediment along the canyon floors (Alex Cabrero, KSL)

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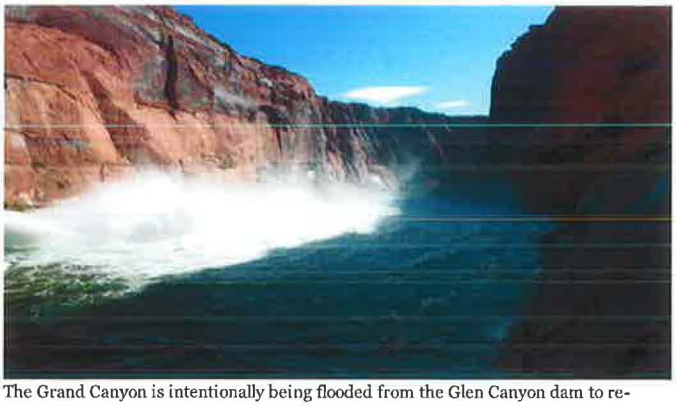

The Grand Canyon is intentionally being flooded from the Glen Canyon dam to re-distribute sediment along the canyon floors (Alex Cabrero, KSL)

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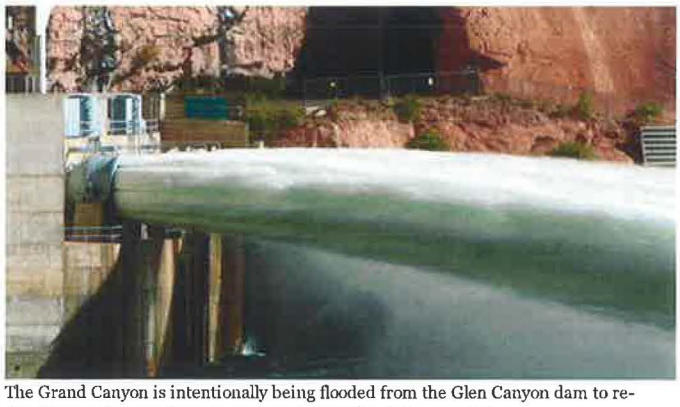

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This is the third in a five-year plan to conduct experimental high-flow releases.

G-16

The Grand Canyon is intentionally being flooded from the Glen Canyon dam to re-distribute sediment along the canyon floors (Alex Cabrero, KSL)

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Deseret News

Wetlands, water proposal stirs controversy among states, farmers, sportsmen

By Amy Joi O'Donoghue , Deseret News
Published: Thursday, Nov. 13 2014 3:50 p.m. MST

Hidden frog as students from Bonneville Elementary take a Wings & Water Wetlands Education Tour at The Great Salt Lake Shorelands Preserve Tuesday, Sept. 20, 2011, in Davis County, Utah. (Tom Smart, Deseret News)

SALT LAKE CITY — Touted as the most comprehensive overhaul of the Clean Water Act since its birth 42 years ago, the proposed, so-called "Waters of the U.S." rule is spurring controversy across the nation.

Sportsmen's groups say it is vital for the protection of the nation's streams and wetlands, singularly the most significant piece of regulation reform to come along that will help protect a $200 billion industry of hunting and angling.

"The Clean Water Act is the best tool we have to protect the quality of our water resources, and its jurisdiction needs to be clear to work effectively," said Jimmy Hague, director of the Center for Water Resources with the Theodore Roosevelt Conservation Partnership.

The partnership is among nearly 200 sportsmen's groups that have weighed in with support for the proposal, citing concerns about efforts to derail protections for wetlands, which they say have experienced a 140 percent increase in their rate of decline between 2004 and 2009.

"We commend your administration's proposed Clean Water Act rule for the protections it restores to headwaters streams and adjacent wetlands, and ask that the final rule offer similar protections for other important yet presently unprotected waters," the groups wrote in support.

The deadline to comment on the proposed rule has been extended a couple of times given the intense interest by multiple groups, with this latest deadline looming Friday.

Hague said the proposed rule clarifies federal jurisdiction over seasonal streams — which involves 60 percent of the stream miles in the United States — and is particularly important to the Prairie Pothole region, which is home to upward of 70 percent of the ducks in North America.

The federal agencies proposing the rule, the Environmental Protection Agency and the U.S. Army Corps of Engineers, say it does not add to or expand the scope of jurisdictional oversight and the proposal actually covers fewer water bodies than were protected in the 1970s.

"We are clarifying protection for upstream waters that are absolutely vital to downstream communities," said EPA administrator Gina McCarthy, with the agency adding that more than half of the nation's lakes, rivers and coastal waters once considered unsafe for fishing and swimming

have now been cleaned up due to the Clean Water Act.

While federal regulators say the proposal is benign and clarifies protections for seasonal waterways as a result of two confusing U.S. Supreme Court decisions, a line of critics charges otherwise, including multiple Utah agencies that are crafting comments to be submitted with Gov. Gary Herbert's approval in time for Friday's deadline.

"Apparently there have been quite a few concerns from different areas of the state government," said Mike Styler, executive director of the Utah Department of Natural Resources. "The concern that I hear is that this rule is overreaching and encompasses too much."

The state Division of Water Quality is weighing in on the rule, as are the Utah State Division of Parks and Recreation, Utah Public Lands Policy Coordinating Office, Utah Department of Agriculture, Utah Department of Transportation, and the state Office of Energy Development.

John Harja, with the Utah Department of Natural Resources, said one of the chief complaints is that the proposed rule is too broad with definitions that aren't universally applicable from state to state.

"What constitutes an upland ditch in Utah is actually very different than an upland ditch in Kentucky," Harja said.

The National Association of Counties, joined by the American Farm Bureau Federation, are among the most vocal critics of the proposed rule, with each claiming it would invoke new and burdensome regulatory oversight.

Stormwater infrastructure, road construction, ditch maintenance projects and flood control projects would fall under Section 404 permitting requirements of the Clean Water Act, which would unleash a cumbersome, time-consuming process that would put basic "public safety" projects at risk, according to the National Association of Counties.

The proposal includes 56 conservation practices that would be exempt from Clean Water Act oversight, but farmers groups say the proposal is an inexcusable overreach that would affect all manners of farming.

"This proposed rule would dramatically expand the reach of extremely costly federal permitting requirements to cover countless land uses, including ordinary farming and ranching activities — even mowing grass in a ditch," according to the American Farm Bureau's general counsel Ellen Steen. "Top-level EPA officials have portrayed farmers' concerns as 'ludicrous,' when in fact they are perfectly valid. Farmers and other small-business owners and land owners deserve better than misinformation from their government."

Uproar over the proposal and concern over its implications prompted the EPA to post an informational rebuttal called "Ditch the Myth," in which it attempts to dispel public misperception over its provisions.

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Utah's Water Consumption May Not Be As Bad As It Seems, Hydrologists Say

By TAYLOR HALVERSEN (/PEOPLE/TAYLOR-HALVERSEN) • NOV 20, 2014

(http://mediad.publicbroadcasting.net/p/upr/files/styles/x_large/public/201411/sprinklers-_rotary_stream-_Pop_mech.jpg)

The 2010 U.S. Geological Survey water usage report shows Utah is one of the biggest domestic consumers of water.

WWW.PINECREST-FL.GOV

Every five years, the U.S. Geological Survey publishes a water usage report showing how the nation fares in water consumption. The 2010 report was published earlier this month.

In conjunction with the release of the report, media have touted that Utah is the worst in the nation for water consumption, but Molly Maupin, a hydrologist with the USGS, said it depends on the category and how the data is being compared.

Listen

She said Utah's domestic water use is one of the highest per capita in the nation.

"In the 2005 compilation, Utah had the highest domestic per capita use," Maupin said. "In 2010, however, Idaho just nudged you out of that prestigious location, if that is what you want to call it."

Idaho's per capita use is 168 gallons per day, while Utah sits at 167 gallons, according to Maupin.

Maupin said desert states' domestic water use is typically much higher than the national average, which was around 89 gallons per person, per day in this 2010 survey.

"Arid western states have very little precipitation in the summer, and in order to keep our gardens and our grasses green, that requires a considerable amount of water," Maupin said.

Maupin said domestic water use is not one of the major areas of water consumption, however.

The survey looks at all key categories where water is being used nationally—public supply, irrigation, industrial and, most significantly, thermo-electric water usage, in which category Utah was not a major consumer.

Maupin said the survey relies on state agencies and outside entities to provide data so they can create accurate per capita representations of water use.

The contribution of inadequate data to the survey can change the findings significantly, which can result in inaccurate comparisons of water usage improvements from state to state. Such is the case, Maupin said, when comparing Utah with its neighbor desert state Nevada, which was found to have a 25 percent decrease in domestic water use.

"Between the two compilation series, 2005 and 2010, there was a significant increase of cooperation and data exchange that was going on between USGS and the Southern Nevada Water Authority," Maupin said. "In Las Vegas they have significant water conservation measures intact and they have a significant amount of water re-use. It's quite likely that our 2005 data was not accurately representing that water conservation or those water savings."

Nationally the total water use for the country declined 13 percent, with a majority of that being attributed to significant declines in the thermo-electric category.

Another unique find, according to Maupin, concerned the national public water supply.

"As the population continues to grow in the United States, the public supply total withdrawals declined. So, that was a significant new trend that we saw that we had never seen before" Maupin said.

Though there were significant national improvements over this last survey period, Maupin advises the public to be vigilant with how they use water domestically, saying there is still much room for improvement.

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Jeremy Lynch · 17 days ago

I feel the title of this article is misleading. Life in the desert regions of the southwestern United States will always be a careful walk of consumption and sustainable resource use. 167 gallons is still a tremendous amount of water, and there are a great number of ways we can begin to alleviate domestic water use strain on our local and regional water supply. As irrigation of our residential land is concerned, we need to push greywater. Reclaiming greywater for secondary use in irrigation is a surefire way to address our still high water use. Let's talk about it.

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Stonegate flush with sewage problems

By Steve Puro spuro@ubmedia.biz | Posted: Monday, November 24, 2014 3:16 pm

First of two parts acknowledging the health emergency in Stonegate.

Discussion in the last Roosevelt City Council meeting regarding the septic field failures at the Stonegate subdivision in Hancock Cove has led to considerations of possible solutions.

Stonegate lies in an unincorporated section of Duchesne County in Hancock Cove, and does not fall under the utility responsibilities of Roosevelt City, but the sewage problems in the development swirl into subtle impacts on the city as a whole.

Driving the recent discussion was the assertion from some land owners in Hancock Cove that excess surface water in the area was the fault of the city.

Stonegate

Some parts of the Stonegate subdivision in Hancock Cover are facing failure of septic systems attached to homes. Rising ground water seems to be the blame. The Tricounty Health Department has placed a moratorium on septic field permits in the subdivision while it looks for solutions.

"Roosevelt City responded immediately to recent claims of excess water in Hancock Cove," Roosevelt City Manager Justin Johnson said. "The City crews performed visual inspections on the culinary system to ensure there were no leaks. Additionally, the City provided sample containers and assisted property owners with sample submissions for testing."

One possible cause is the advent and availability of secondary water in the Cove area.

"Some of these homes have been there for five or six years and hadn't had much trouble," Roosevelt City Councilman Gordon Snow said. "The arrival of secondary water from Sand Wash brought pressurized irrigation not only to some Roosevelt residents, but also irrigation farmers and some residential property owners in the Cove area."

Additional pivots and wheel lines have been brought to the area by farmers and some houses have added grassy landscapes to their homes, which require watering to maintain.

"There are no meters on that secondary water in the Cove," Snow said. "The low annual cost of the secondary water has increased farming and large yards have increased the amount of water on the surface there. The area was already an area of concern for ground water before the housing even started out there. People who have lived here knew the history of that area."

But that long term history hasn't helped those who have bought land in the development and built their homes there in recent times.

Dr. Dan Robinson DDS, moved into the Stonegate development, invested in a business in Roosevelt and settled down with his family.

"I have ground water at 10 inches and the septic system does not function," Robinson said.

After spending tens of thousands of dollars on wells to pump his ground water out, rebuilding a new septic field and adding soil to his property, the system failed again as cold weather arrived.

"The ground water is back," Robinson said. "It froze Oct. 29 and within four hours of the pumps not running the ground water returned. Sewage from neighborhood's septic fields is working its way into the surface water. The ground water is all contaminated and I have had samples tested. It all contains E. coli bacteria."

Robinson is frustrated on several fronts.

"I have followed the recommendations of Tricounty Health and have done everything I was supposed to do and now I am without a home," Robinson said.

In order to keep his family healthy, Robinson has moved his family to a relative's residence on the Wasatch Front until a solution can be found. Robinson is committed to staying in the Roosevelt area, but says a solution must be found to save his home and help reunite his family.

"There are probably 10 other homes out here with the same problems," Robinson said.

One of those other homes belongs to Andrew Adamson.

"When they started putting fields in next to us, water began to run into my basement," Adamson said. "It got worse and worse, Now I have alkali in my basement. If a solution isn't found, I will have to replace the concrete in my basement."

Adamson's septic field has four legs of drain field.

"One leg of the septic system has failed," Adamson said. "The county has dug a well on the side of my property. Water is less than 20 inches down in the well. It's almost on top of the ground and the alkali is terrible."

Duchesne County, in an effort to find a possible solution, put in four wells to try to draw down the water table. The wells were a $22,000 investment by the county, but only one well is running according to Robinson.

Tricounty Health Department Director Jason Mathis says the department is looking at the sewage problems in the Stonegate subdivision in particular and the continued development of Hancock Cove in general.

"There are several failed systems in that subdivision," Mathis said. "We have stopped issuing septic tank permits in that subdivision."

According to Snow, work was begun two or three years ago to study a proposed Cove Sewer District.

During the Aug. 21, 2012, Roosevelt City Council meeting, Byron Colton, engineer, gave a report developed by Horrocks Engineering, which was funded by the Duchesne County Commission to study the drainage issues in Hancock Cove.

Nearly a year of study indicated that such a system was financially feasible.

The Horrocks Engineering report of 2012 stated that to develop a complete sewer system in the cove area, estimated costs were set at $7.7 million to serve a total of 321 connections and include growth at an estimated 12 ½ percent. Such a growth projection would predict the cove doubling in density in the eight years following the study.

"That would generate about $200,000 a year in revenue," Colton said. "That would be sufficient to meet a funding strategy of 50 percent loan and 50 percent grant."

Boundaries for such a sewer district were outlined roughly as running to a point just north of the Bluebell Road and as far west as 4000 west from the existing Roosevelt City limits in 2012.

When a straw vote was asked of Roosevelt City Council members about future development to the west during the Aug. 2012 meeting, the answers all came as a collective "no".

"I don't see us annexing the cove for decades and decades because the roads alone would be overwhelming," then city councilman David Labrum said to the idea of annexing part or all of the Cove.

A public meeting was held in 2012 at the Crossroads Center to discuss possibilities. A letter was also sent out Nov. 8, 2012, which outlined preliminary costs and conditions for Roosevelt City to participate in the proposed sewer district.

"A number of people came to that meeting in 2012 already upset that Roosevelt was trying to take them over, that isn't our intention," Roosevelt City Mayor Vaun Ryan said this week. "But, we need to do more than just talk about it over the back fence though."

"We, as a council, want to see if there is some way to offer our services to the area that is closest to us and invite them to join us as part of our city," Snow said. "We feel like we could respond to some of their issues, since we are the owners of the sewer lagoons. We believe we could respond quicker to their issues, than perhaps any other way."

The Stonegate subdivision is contiguous with the Roosevelt City boundaries, which meets one of the criteria for joining with the city according to Snow.

"We want those citizens to know, if they need our help, we can help," Snow said. "We are willing to help them, and they would need to join us for us to do that. I am not sure if they know how to reach out for our help."

All agree there is no "cheap" solution. Both the proposed sewer district and the city plan flow effluent to the city owned sewage ponds.

"I credit the city for looking at the situation," Mathis said.

"The city council would still have to weigh in and discuss the matter. Annexation is not just a slam dunk," Ryan said.

"It's a huge question of whether we can really afford it," Snow said. "But, do we let those people die on the vine and watch homes be possibly condemned? That affects our community too. When you start losing those who have businesses in our town, it affects our town significantly too."

Minor pipeline leaks may pose a major problem in Utah

By BRIAN MAFFLY (/staff/?ID=76) | The Salt Lake Tribune CONNECT (/staff/?ID=76)

First Published Nov 27 2014 03:09PM • Last Updated Nov 27 2014 04:47 pm

In June 2013, a pipeline rupture near Price released at least 85 barrels of "production water" into a stream, one of many modest spills the state has endured in recent years associated with oil and gas operations.

Last month, after more than a year of negotiations, the state Division of Water Quality (http://www.waterquality.utah.gov/index.htm) (DWQ) resolved alleged environmental violations arising from the spill with operator Gordon Creek Energy (http://www.gordoncreekenergy.com/s/Home.asp).

Even though the natural-gas producer failed to report the incident to the Utah Department of Environmental Quality and it took a few days to stop the leak, the division settled the matter with a $3,200 fine and no admission of wrongdoing on the company's part.

"The impacts to the environment were minor and short-lived, and they have shown they are making an effort to replace and improve the system and respond quickly to any releases," a DWQ report states. "The releases do not appear to be the result of avoiding any expense related to maintenance and repair. They appear to be the result of an aging system that is being worked on and improved as it can be."

However, the state personnel took few steps to assess the environmental damage or to corroborate the company's claim that the spill was confined to 85 barrels.

"A lot of trust has to go into the producers because we have no way to gauge [spill volumes]," DWQ Director Walt Baker said. "It's not an exact science. We were able to take samples there. It wasn't that we were bereft of information."

Around the time of the accident, the Gordon Creek wells were yielding larger-than-expected volumes of water, which impeded gas production, according to the company's financial disclosures last year. Production water represents one of the industry's largest environmental challenges, posing a huge disposal obligation. This water is laced with hydrocarbons, salts and chemicals that are harmful to ground and surface water, and its disposal is highly regulated.

Still, a review of the state's spill database shows that production water routinely escapes into the environment — from pipelines and trucking accidents to well blowouts.

On Nov. 13, for example, a truck carrying production water from Fidelity's Big Flat oil field near Moab rolled on switchbacks on State Road 313, discharging about 100 barrels into Seven Mile Wash. On Nov. 6, a pipeline rupture near Myton in eastern Utah released 110 barrels into a dry wash. In an earlier instance, a truck driver was caught deliberately discharging the contents of his tanker onto the ground.

Yet the impacts associated with production water have gone largely unnoticed by the public.

"When we look at other states, you are talking about hundreds of spills. New Mexico has 700 to 1,000 a year that affect surface and groundwater," said Bruce Baizel of the Colorado-based Oil & Gas Accountability Project. "All these little spills cumulatively add up. Every time we poke into it we discover it's a big deal. They underreport what they spill because no one is checking and they misreport what they spill."

Because the Gordon Creek fine is below $25,000 it does not need approval from the Water Quality Board, but it is open for public comment until Monday. The firm is required to submit a report to Baker detailing efforts to prove and ensure the integrity of the disposal line.

Baker conceded a year is too long to resolve such a straightforward case and said he hopes recent efforts to coordinate responses and information gathering among state agencies will streamline enforcement.

He convened a spills working group last year in response to Utah's increased oil production. The purpose was to determine the best way to "triage" the agency's response to the hundreds of spills crossing Baker's desk each year.

The agency cannot pursue every spill, he said, deciding instead which ones warrant an enforcement action.

"It's a matter of magnitude and impact," Baker said.

The Gordon Creek spill was detected June 10, 2013, after an employee noticed an unusual drop in flow pressures. He drove around the field to investigate, discovered the rupture and shut off all the producing wells in an effort to isolate as many flow lines as he could, according to the DWQ report.

But the line continued leaking and production water reached Bob Wright Creek, which feeds the Price River about 10 miles downstream. The employee called service companies but none could come and repair the line until June 12. It wasn't until 5 p.m. June 11 that company managers notified the Utah Division of Oil and Gas and Mining, which relayed the information two days later to the Department of Environmental Quality. The line was fixed by June 13.

» Next page... (/news/1872384-155/minor-pipeline-leaks-may-pose-a?page=2)

Single page (?fullpage=1) 2 (/news/1872384-155/minor-pipeline-leaks-may-pose-a?page=2)

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You are soon right Skier Jim7, Dirty Herbie and his minions want to rape and pillage the earth here. Corporatism is one of the only two belief systems here in Utah...

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There is nothing "minor" about these events. I agree with Skier--it's so very obvious that the only clean up is cover up, which is consistent with many aspects of this "State of Denial." Filthy is the word that comes to mind: filthy air, filthy water, filthy politics. I hope Utah stories like this go viral so the rest of the world can see the ubiquitous corruption in this state. The timely article regarding Utah's abysmally low voter turnout explains a lot...

Cache County closer to stormwater plan

Posted: Saturday, November 29, 2014 7:04 pm

Storm water regulations have created a headache for the Cache County Council, and at a meeting Tuesday night, the council discussed the regulations as a part of the storm water management plan.

Josh Runhaar, the county development director, said the storm water management plan is the first piece that will get sent to the state. The stormwater regulations are being mandated by the Environmental Protection Agency to reduce the amount of pollution in fresh water rivers and lakes.