

Overview of the Design and Construction Activities for Zone B



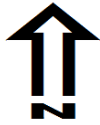
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Mark Atencio









March 17, 2010

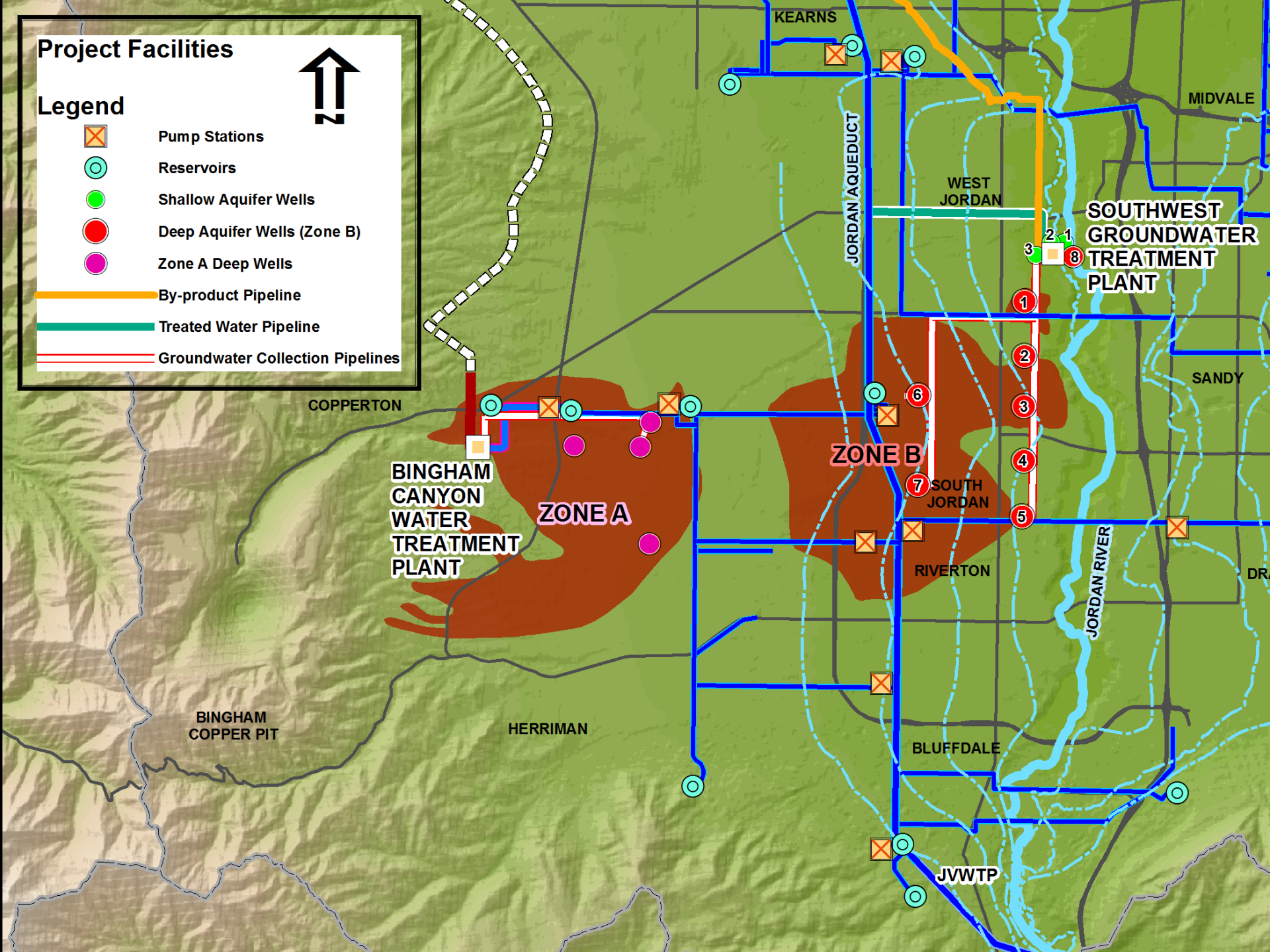


Project Facilities



Legend

-  Pump Stations
-  Reservoirs
-  Shallow Aquifer Wells
-  Deep Aquifer Wells (Zone B)
-  Zone A Deep Wells
-  By-product Pipeline
-  Treated Water Pipeline
-  Groundwater Collection Pipelines



(Reminder)

2004 Recommendations

1. Pursue project with Zone B by-product water discharge to Tailings Impoundment
 - a. Capital cost increase of \$2.9 million
2. Defer Lost Use project components in order to further study by-product discharge effects to the GSL.

Zone B Facilities

2009-2010 Activities

- Supported Completion of Great Salt Lake Selenium Studies & Standard Setting Process



Utah Department of
Environmental Quality

The mission of the Department of Environmental Quality is to safeguard human health and quality of life by protecting and enhancing the environment.

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Great Salt Lake Water Quality Steering Committee Selenium Program

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Under the Steering Committee's oversight, a science panel is looking at the existing selenium studies on the Lake and conducted additional work, where necessary. The committee will consider the science panel's work, then make a recommendation to the Water Quality Board. If the Board accepts the recommendation, the standard will be sent out for public comment before the action is final.

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Photo by: Matt Kretsinger

UTAH WATER QUALITY BOARD

Wednesday October 22, 2008

Request for Final Approval of Water Quality Standards (R317-2) Revisions and Timeline for Final Adoption:

The changes to R317-2 were approved, with Mr. Olsen and Ms. Doughty opposed to the changes.

R317-2-14 Numeric Criteria

Selenium (14) Gilbert Bay (Class 5A) Great Salt Lake Geometric Mean over Nesting Season (mg/kg dry wt) 12.5

(14) The selenium water quality standard of 12.5 (mg/kg dry weight) for Gilbert Bay is a tissue based standard using the complete egg/embryo of aquatic dependent birds using Gilbert Bay based upon a minimum of five samples over the nesting season. Assessment procedures are incorporated as a part of this standard as follows: Egg Concentration Triggers: DWQ Responses Below 5.0 mg/kg: Routine monitoring with sufficient intensity to determine if selenium concentrations within the Great Salt Lake ecosystem are increasing. 5.0 mg/kg: Increased monitoring to address data gaps, loadings, and areas of uncertainty identified from initial Great Salt Lake selenium studies. 6.4 mg/kg: Initiation of a Level II Antidegradation review by the State for all discharge permit renewals or new discharge permits to Great Salt Lake. The Level II Antidegradation review may include an analysis of loading reductions. 9.8 mg/kg: Initiation of preliminary TMDL studies to evaluate selenium loading sources. 12.5 mg/kg and above: Declare impairment. Formalize and implement TMDL.

Zone B Facilities

2009-2010 Activities

- Waited for the Selenium Standard to be Adopted prior to Submitting a Permit Application

Zone B Facilities

2009-2010 Activities

- JWCD has submitted a UPDES Permit Application for By-product Discharge to Great Salt Lake
- In response to concerns expressed by the Division of Water Quality, JWCD has modified its application and submitted additional information

One of Great Salt Lake's
Beneficial Uses:
water-oriented wildlife and
their necessary food chain



Permit limits
structured to
protect
wildlife



Photo by CDS



Questions?