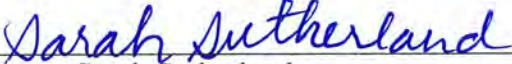



**United States Department of the Interior
Central Utah Project Completion Act Office**


Central Utah Water Conservancy District

**FINDING OF NO SIGNIFICANT IMPACT
And
DECISION DOCUMENT**

**WCWEP Recycled Water Project
Wasatch County, Utah**

Recommended by:  Date: 4-23-10
Sarah Sutherland
Environmental Programs Manager
Central Utah Water Conservancy District

Recommended by:  Date: 4-23-10
Lynn Hansen
Program Coordinator
U.S. Department of the Interior
Central Utah Project Completion Act Office

Approved by:  Date: 4-23-10
Reed R. Murray
Program Director
U.S. Department of the Interior

**FINDING OF NO SIGNIFICANT IMPACT
WCWEP RECYCLED WATER PROJECT
WASATCH COUNTY, UTAH**

In accordance with Section 102 (2) (c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and the Department of the Interior regulations for implementation of NEPA (43 CFR Part 46), the Department of the Interior (Interior) and the Central Utah Water Conservancy District (CUWCD) find that the proposed action analyzed in the December 2009 draft environmental assessment (EA) for this project would not significantly affect the quality of the natural or human environment. Therefore, an Environmental Impact Statement is not required for the proposed water recycling project.

The proposed action analyzed in this EA is the use of recycled water discharged from the JSSD Water Recycling Facility (WRF) as Central Utah Project (CUP) water in the Heber Valley area of Wasatch County, Utah. The proposal is to accept WRF discharges into the WCWEP canal system for distribution within the Heber Valley via either the Timpanogos Canal or the Wasatch Canal.

FINDINGS

The finding of no significant impact is based on the following:

1. The proposed action will have no adverse effect on such unique characteristics as cultural resources, wilderness areas, wetlands, and riparian areas.
2. Public concern was expressed over use of JSSD's Water Recycling Facility effluent in the WCWEP canals. However, research and analyses for the EA conclude that the effluent would not have adverse effects to the human environment, and that Federal and state water quality standards which protect human health will be met over the life of the plant. Further, environmental commitments described in Section 3.4.1 and updated below, will be implemented to verify that analyses and predictions in the EA are reasonably accurate.
3. The proposed action will have no adverse effect on species either currently listed or proposed for listing as candidate, endangered, or threatened species, and no adverse effect on designated critical habitat for these species.
4. The proposed action does not threaten to violate Federal, state, or local laws or requirements imposed for protection of the environment.

Interior and CUWCD have analyzed the environmental effects, public comments, and the alternatives in detail and find that the proposed action meets the purpose and need described in the EA with no significant impacts to the human environment.

DECISION

Interior and CUWCD have decided to implement the combined Wasatch and Timpagonos Canals alternative which will allow JSSD to discharge WRF effluent into the WCWEP canal system as described in the EA and under a contract with Interior and CUWCD.

ENVIRONMENTAL COMMITMENT

- 1. Water Quality Monitoring:** Analysis shows that implementation of the proposed action would not have a detrimental effect on water quality in the project area. As stated in the EA, EPA has concluded that to date there is no basis for concern to human health or the environment from PPCPs. CUWCD, Interior and JSSD commit to continuing to sample water quality in the project area for a period of 5 years in order to verify conclusions reached in the EA. CUWCD will maintain a database of the test results regarding pollutants of concern including pharmaceuticals. CUWCD will continue to work with all appropriate local, state and Federal agencies on the long term need for good water quality.

REVIEW OF PUBLIC COMMENTS AND REVISIONS TO THE DRAFT EA

All public comments received during the draft EA public comment period were carefully considered and reviewed together with the information contained in the EA in determining whether to issue a FONSI as well as which alternative to implement. A summary of comments received, responses to those comments, and reference to any related revisions to the draft EA is attached to this FONSI. The final EA containing the specified revisions will be posted on the internet at www.cuwcd.com, and copies of the EA are available on request by contacting Sarah Sutherland, Environmental Programs Manager, CUWCD, telephone (801) 226-7147, email sarah@cuwcd.com.

Attachment: Comments on the draft EA and Responses

Responses to Comments Received on the WCWEP Recycled Water Project Draft EA

Committer and Comment	Response
Mayor Michael Duggan	
<p>1. Phosphorus and other components deemed harmful to Deer Creek Reservoir will be placed in canals with same resultant algae blooms. Has any mitigation money been set aside to help individual irrigation companies deal with this problem on a continuing basis? If not, why not?</p>	<p>As stated in section 3.3.2 on page 31 of the EA, the UPDES permit was issued based on the discharge meeting water quality standards of the Provo River and protecting its designated beneficial uses. The effluent limitations on each outfall are identical because it is recognized that water discharged to the canals also eventually returns to the river or to Deer Creek Reservoir. The phosphorus limits have been established to meet the requirements of the approved TMDL for Deer Creek Reservoir resulting in effluent concentrations that should be similar to those concentrations found in Provo River. There should not be a detectable increase in phosphorus or algae density in the canals, therefore no mitigation is necessary.</p>
<p>2. The Daniel Irrigation Company has a contract specifying the source of water traded in a 1996 contract. Simply saying that two things are equal does not necessarily make it so. Why was this point not addressed?</p>	<p>The intent of the 1996 Agreement language was to secure a water source to meet the commitment to provide replacement water to the Daniel Irrigation Company. Water diverted from the Provo River to the Timpanogos canal is diverted under Timpanogos canal rights and the WCWEP rights. These water rights originate from the Provo River. The physical water actually consists of a mixture of waters that come from the Provo River and waters that originate from outside the Provo River basin. This includes water from the Weber River, Shingle Creek, Beaver Creek, Duchesne River and the Ontario Drain Tunnel. The 1996 Agreement does not address conveyance of other waters in the Timpanogos Canal and is not relevant to this environmental analysis.</p>
<p>3. To report background levels of radiological blocking agents, flame retardants, and stain resistance chemicals is at best disingenuous. Of course the deer and antelope do not use these chemicals and therefore their current concentrations are incredibly dilute.</p>	<p>Identification of baseline contaminants as part of the water quality analysis for the EA (Section 3.2) was undertaken in response to public scoping comments. Pharmaceuticals, PPCPs, and other chemicals currently found in the waters of the project area were presented in Section 3.2.2 of the EA. The background levels represent the baseline levels of contaminants. As described in Section 3.3.2.4 the JSSD, CUWCD, and the Provo River Watershed Council plan to continue the monitoring of PPCPs and other chemicals. Future monitoring will help</p>

<p>verify that there is no effect from the WRF effluent on PPCP levels by comparing with baseline levels.</p>	
<p>Delivery of the WRF effluent to Red Ledges via pipeline was under consideration by JSSD prior to Interior and CUWCD proposing the recycled water project as analyzed in the EA. This option was not considered in the EA because it does not provide for year-round discharge and beneficial use of the WRF effluent, nor does it fulfill the other purposes of the proposed project.</p>	<p>4. If the only reason that this water is not being piped to the Red Ledges golf courses as secondarily proposed (after the phosphorus/Deer Creek Res. problem was identified) why not simply come clean with that? The people of the valley could have been offered the opportunity to help to mitigate the problem.</p>
<p>There is scientific literature on the PPCP issue and PPCPs are discussed in Sections 3.2.2 and 3.2.4 of the EA in response to comments made during public scoping for this EA. UPPDES permit number UT0025747 authorizes JSSD WRF to discharge to four outfall locations. This permit requires compliance with established water quality standards and protects the beneficial uses of downstream uses in the Provo River and the irrigation systems. As described in the Draft EA, PPCPs and EDCs are not regulated by the State of Utah or the US EPA and there are no applicable regulatory standards for the JSSD WRF UPPDES permit. If the U.S. EPA or the State of Utah establishes more stringent water quality standards or new water quality standards, the JSSD WRF would be required by their permit to meet all applicable federal and state standards. Section 3.2.4 describes studies of the fate and removal of PPCPs and EDCs in wastewater treatment. One study indicated that membrane bioreactor technology (the technology to be utilized by JSSD) was more effective in removing EDCs than conventional treatment processes.</p>	<p>5. The science of the PPCP issue simply does not exist. There are however ways to limit possible future impact, such as those in place at Kimball Junction. This question was asked several times before your EA was produced. Why not answer it?</p>
<p>Comment noted.</p>	<p>6. For these and other reasons, I ask you to choose the no action alternative.</p>
<p>Information contained in the EA is complete and supports the conclusion that there are no significant effects to water quality from the proposed action. A 5 year monitoring program will be implemented to verify the</p>	<p>7. After examining the draft, I am of the opinion that this serves as a good baseline place to start in evaluating the project, but it in no way</p>

<p>should justify a finding of no significant impact. In fact, I believe that the impacts of this recycled wastewater reuse experiment will not become evident until some years after the initial operation of the WRF.</p>	<p>conclusions in the EA.</p>
<p>8. I become especially concerned that the EA clearly states that PPCPs and EDCs are an issue, but the state and federal guidelines do not address them at this time. More research must be conducted to know what the dangers are.</p>	<p>As stated in Section 3.3.2.4 of the EA, to date EPA has found no evidence of adverse impacts from PPCPs on the environment. According to EPA: “More research is needed to determine the extent of ecological harm and any role it may have in potential human health effects. To date, scientists have found no evidence of adverse human health effects from PPCPs in the environment.”</p> <p>The EA concludes in Sections 3.3.2.2 and 3.3.2.3 that the effects to existing water quality from use of the WRF effluent are negligible, in comparison with the no action alternative (Section 3.3.2.1). Given the current guidance from the state and EPA additional research is beyond the scope of this EA and is not required.</p>
<p>9. I find the analysis of how long it would take for an individual to receive the equivalent of a Tylenol or a cup of coffee interesting but extremely misleading as this analysis is based on the current pollutant levels—which I find significant since there is very little population being served at this time.</p>	<p>Please see response to comment 3. Equivalent doses of different products were presented to make the sample data more tangible.</p>
<p>10. This indicates to me that the numbers can only grow from this level, but some people will use this analysis as a justification for arguing that there is NO risk. I’m not particularly concerned about caffeine, ibuprofen or acetaminophen. But I did find BPA and Triclosan more worrying as I would try to limit my family’s exposure to those chemicals and</p>	<p>Comment noted; the EA analyzes whether the WRF effluent causes effects to existing water quality. It is acknowledged that within the Provo River watershed there are contaminant sources such as septic fields and other uncontrolled discharges that could affect water quality.</p>

	<p>many others.</p>	
<p>The amount of water actually exchanged is 2.5% to 13% of the CUP water that has been and would continue to be carried in the WCWEP canals, depending on time of year. While there could potentially be an impact, it would likely be so small as to not be statistically significant. There have been several studies which actually show that the productivity of lands which receive treated effluent is greater than without. However in these cases effluent was the only source of water being applied. The negative perception of using treated effluent was discussed in section 3.3.5.2 of the EA.</p>	<p>11. I also disagree that there will be no socioeconomic impact. Each person with irrigation shares has invested significant amounts of money to purchase those shares. If there is an impact caused by the substituted irrigation water, the value of those shares will be diminished. The water will be just as wet, but it may not be as valuable in the water share market. And who is to say that the land itself irrigated by this water will not be economically impacted?</p>	<p>12. My final comment centers upon the water rights exchange. While CUP seems to agree that the Utah State Engineer would have to approve any exchange agreement made by JSSD, CUWCD, Reclamations and DOI, (did I leave anyone out?)—I don't see Daniel Irrigation mentioned. I'm sure that this small irrigation company seems insignificant in the grand scheme of things, but it would be nice to see a "face" put on a project of this scale. The exchange of this water is not insignificant to me, to my neighbors or to many other individuals who reside in the Heber Valley. There are many here who still carry on in small farm operations, and in this economic environment, it would be nice to recognize that there are other things at stake above and beyond the need to provide additional water for residential development. We are good stewards of the land and of the water that helps our land produce its bounty, and we expect that</p>
<p>JSSD and the United States would file the sewer reuse notice and any other necessary water right applications because they are the owners of the underlying water rights. The State Engineer would advertise these applications and allow the public to comment on them. The EA analysis indicates that there would be no impact; however, Daniels Irrigation and any other potentially affected water right holders could protest the applications and participate in the public review process if desired.</p>		

<p>the persons charged with implementing and operating this WRF will address the issues involved with wisdom and guard our futures as though it were their own—as in fact it is.</p>	
<p>Metropolitan Water District of Salt Lake and Sandy</p>	
<p>13. Comment on table 4 page 22: The Average Concentration is presented in mg/L while the State Standard is in µg/L, leaving the reader to make their own conversion to be able to recognize if the standard is being met. For both Aluminum and Barium the Average Concentration is orders of magnitude higher than the State Standard. This is of great concern to the District. Are the units correct for both the Average Concentration and the State Standard?</p>	<p>The Average Concentration units in Table 4, page 22 are incorrectly labeled as mg/L. The correct units are µg/L. Table 4 was intentionally compiled using the same units for Average Concentration and the State Standard so the reader would not be required to convert the units for comparison. The incorrect labeling of the units in Table 4 will be corrected in the final EA. After considering the correct labeling of the units the parameters Aluminum and Barium are below State Standards.</p>
<p>14. Comment on page 32, paragraph 3: It states that during the interim period the total phosphorus load would be up to 92 lbs/year and at full capacity the total phosphorus load would be up to 137 lbs/year. The actual permit limit for total phosphorus load is 91 lbs/year. Our concern is that both of these effluent levels exceed the permit limit. This is the reference to that which is discharged to the infiltration basin. Is it assumed that these levels will decrease before the water actually reaches the Provo River? I did not read the reduction idea from the No Action Alternative but it is suggested on page 33 paragraph 4 by the statement “phosphorus would adsorb to soils”. Please clarify, would JSSD’s UPDES Permit</p>	<p>Phosphorus loads from this discharge alternative are estimated using the UPDES discharge limits for the daily maximum allowable discharge concentration (0.15 mg/L) and a flow of 0.2 MGD during the interim period, and the 90-day average concentrations for May-Oct (0.03 mg/L) and Nov-Apr (0.06 mg/L) and a flow of 1.0 MGD at full capacity. Please note that the proposed discharge under the no action alternative is not permitted in UPDES Permit Number UT0025747. Before discharging to an infiltration basin JSSD would be required, at a minimum, to obtain a Ground Water Construction permit. JSSD may also need to obtain a Ground Water Discharge Permit if the infiltration basin cannot meet R317-6-6.2 criteria. Phosphorus reduction from sorption to soils or other influencing factors would need to be addressed in the discharge permit in order to estimate phosphorus loading to the Provo River. JSSD would not be allowed to exceed the Total Phosphorus load of 91 lbs/year.</p>

allow for variances at certain times of the year that could result in phosphorus maximum load being exceeded?	Dennis B. Jensen	Sections 2.3 and 3.3.2.1 in the EA have been revised for clarification.
15. I am not in any way in favor of putting effluent into our canals in Heber Valley. There are too many potential dangers involved.	Ralph & Ruthie Lugton	Comment Noted
16. Since recycled water can still contain chemicals harmful to animals as well as people, it is not wise to put it in our Daniel Irrigation System.		Please see responses to comments 3, 8 and 9 above.
17. We could not get the CD to work on our home computer so we cannot comment on its content.		We are sorry for the inconvenience. As indicated in the draft EA transmittal letter, the draft EA was also available for access on the internet at the CUWCD web site, and we did send a paper copy after learning of your technical difficulty.
18. We still see problems with using the recycled effluent water in our irrigation system (Daniel Irrigation Company).		The EA shows that the effects to water quality from the proposed action are negligible.
19. Would you drink this water, grow food with it and eat the produce, feed your crop to your dairy cows and drink the milk?	Joyce C. Anderson	The effluent is required to meet Federal and state water quality standards, which are designed to protect public health. See responses to comments 3, and 5 above.
20. No one could answer the question of the harm pharmaceutical residue in the water could have on our health.		Please see responses to comments 3, 8 and 9 above.
21. Our grandchildren play on the yard watered by this irrigation. Possibility of sickness or disease worries us.	Benny & Judy Gardner	As stated in the EA, the volume of treated effluent present during irrigation season is small relative to the volume of the canal systems. During the irrigation season the JSSD WRF effluent could constitute 3% to 6% of the water diverted to the Timpanogos Canal during the months of May through September. E. coli effluent limitations defined by the JSSD WRF UPDES permit are more stringent than the numeric criteria

	of any of the Provo River's designated beneficial uses, including the designated uses of the canals, and also meet Utah's numeric criteria for primary contact recreation.
22. We are very concerned about the value of my property. The knowledge that raw sewage is being release into the water system for the upkeep of the property would most likely decrease the value of the lot.	The proposed action analyzed in the Draft EA does not propose the release of raw sewage into any water. All raw sewage would be treated at the JSSD WRF. The Draft EA proposes the release of treated effluent from the JSSD WRF at different locations.
23. There would undoubtedly be an unpleasant odor or smell using this water. For an example, the county farm on Hwy 89 uses the Wasatch County sewer water to irrigate the property. In the summer heat you can definitely smell the odor.	The JSSD WRF is a different treatment process from the Wasatch County sewer plant. As explained in the EA, the effluent water will be treated with State-of-the-Art technology. In addition, as stated in the EA, during the irrigation season, water in the Timpanogos Canal would be comprised of 3% to 6% treated effluent from the JSSD WRF and 2% to 9% of the Wasatch Canal.
24. If the Provo River Authorities denied the dumping of this sewage, why shouldn't we also deny it? We assume they had a good reason for denying it as they are acting in the best interest of the river.	Please see response to comment 22 above.
Blaine & Juanita Webb	
25. Several comments in opposition to proposed action.	Comments noted.
Office of the Governor, State of Utah, Public Lands Policy Coordination, John Harja, Director	
26. The EA did not include air quality as a concern; fugitive dust rules would apply to construction.	Air quality was inadvertently omitted from the list of resources determined to be not affected in Section 2.6 of the draft EA. It is acknowledged that all relevant Federal, state, and local air quality rules apply to any construction related to this project, and JSSD would have to obtain all appropriate permits. Given compliance requirements, including R307-207-5, analysis in preparing the EA determined no measurable

<p>effects.</p> <p>Section 2.6 has been revised to clarify that air quality was reviewed and determined to not be affected by implementation of the proposed action; this is due to the need for JSSD to comply with air quality requirements during construction.</p>	<p>Heber City</p>
<p>CUWCD collected a groundwater sample via the Hospital Well on March 2, 2010. Groundwater monitoring at the Hospital Well will be included in the 5 year monitoring program to verify the EA conclusions that effects from the proposed action on water quality are negligible.</p>	<p>27. Heber City is concerned that the project could affect its groundwater supply now or in the future. Without baseline testing of the groundwater, any cumulative adverse impact on the water supply, particularly from pharmaceuticals, would be difficult to assess in the future. We request that the final report be amended to add a sampling point for Heber City's groundwater supply, and that groundwater continue to be monitored in the future.</p>
<p>Comment noted; this procedure is required to be followed for all of our projects and activities.</p>	<p>28. The project is unlikely to affect cultural resources to the Hopi Tribe. We recommend that if any cultural features or deposits are encountered during project activities, these activities must be discontinued in the immediate area of the remains and the State Historic Preservation Department must be consulted. If any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law.</p>