

Cascade Water Connections Working Group Meeting #4

December 11, 2009, 8 am – 11:30am
Bellevue City Hall
450 110th Ave. NE, Room 1E 108, Bellevue

Welcome

The Cascade Water Connections Working Group convened for its fourth meeting on December 11, 2009. Lewis Michaelson, Katz and Associates welcomed everyone.

Review of September Meeting Summary

Lewis asked the group if there were any questions or comments regarding the summary of the third meeting, sent after the meeting.

There were no questions or comments, and the summary was approved as final.

Presentation

Andrew Graham, Planning Lead, HDR, gave a presentation to the group that provided:

- A review of the demand forecast under different scenarios.
- An explanation of the supply options eliminated from further evaluation.
- An explanation of supply options advanced to the next stage of evaluation.
- A look at several different combinations of the remaining supply options, organized into “portfolios” and showing how supplies could be phased over the 50-year planning period.

Detail about each of these sections can be found in the accompanying presentation.

The projects eliminated from further evaluation were:

- Lake Washington
- Direct potable reclaimed water
- Snohomish River
- Desalination
- Satellite reclaimed water
- Stormwater capture
- Tacoma “Light”
- Chambers Creek Wells
- Snoqualmie Aquifer

The sources advanced to the next stage of evaluation are:

- SPU Expanded Block
- TCP with North Segment
- TCP with Wheeling
- TCP Expanded
- Enhanced Conservation
- Brightwater Reclaimed

- OASIS Phase 3
- Lake Tapps
- Deep Resource Aquifer
- Cascade Member ASR

The sources advanced to the next stage of evaluation were then combined in the following initial portfolios of projects to show potential phasing.

- 2009 Baseline
- SPU Expanded
- TPU Expanded
- SPU/TPU Combined
- SPU or TPU with Other Sources

Questions and comments from the group on the presentation included:

Q: Why has present water demand leveled off?

A: Cascade has not analyzed this but Seattle and Tacoma have also experienced this trend. Things such as more efficient watering, faucets and toilets along with smaller lot sizes and denser living have all contributed to lower water use per capita.

Comment: PSRC is in the process of updating their population forecast modeling. It should be ready for beta testing later this year with full-scale implementation by 2012. PSRC in the past has been off in forecasting the distribution of population growth.

Q: How does the aspect of climate change in Scenario B increase projected water use?

A: Statistical analysis of 10 years of water use in Cascade's service area demonstrated that increased temperatures and decreased precipitation correlate with increased water use.

Comment: There also might be an increase in indoor water use during high temperatures in the form of more showers or baths for cooling purposes.

Q: Did Cascade look at the possibility of a jurisdiction, such as Snoqualmie, joining which would bring additional water supply?

A: No, when looking at Scenario C, Cascade only looked at the possibility of an outside jurisdiction joining Cascade Water and needing supply or buying water from Cascade.

Q: Is the Deep Water Aquifer source a replenishing supply?

A: That potential source actually needs much more evaluation. If it was found not to be a replenishing source then it would not be used.

Q: How much water does Cascade currently get from wells?

A: Currently, there are five Cascade members that have their own wells and the daily average is about 12-14 million gallons per day total from those wells. The five members have about 30 wells between them.

Comment: Nearly a third of the water in the King County region comes from wells.

Q: Was the same factor used to convert average annual demand to maximum week for individual sources?

A: No, the maximum week demand was calculated using data from the summer of 2009. The individual sources use the highest production characteristics of each source, and these are then added together. The summer of 2009 was really hot so the maximum week demand forecast is pretty conservative.

Q: Has there been an assessment of Lake Tapps under climate change conditions?

A: Yes, the University of Washington ran the analysis and this will be discussed in the EIS.

Q: At this level of analysis are you factoring the long-term capital investment strategy associated with these sources or does that come later?

A: Cascade is just beginning that work. Later on there will be a capital and operating cost analysis for each portfolio. The Cascade Board has always had an interest in using current supply before building new supply.

Comment: There are also infrastructure costs with expanding service from Seattle or Tacoma. This could come from capital costs for building transmission lines or higher rates for improved water treatment.

Comment: Cascade should consider the costs of building something now compared with building it in the future. When dealing with highways and roads, it is always more expensive waiting and building later.

Comment: Putting off construction of a pipeline does not necessarily mean putting off acquiring right-of-way or furthering design. The Tacoma-Cascade Pipeline is currently at 90% design and the right-of-way has been identified.

Q: How do you account for conservation?

A: Cascade will continue conservation efforts. By 2060 conservation is forecasted to save about 6 million gallons per day or about 10%. Cascade is also looking at more aggressive conservation as a source. More aggressive conservation involves mandatory requirements such as building and landscape codes. Aggressive conservation would double the savings.

Q: Are there plans of incorporating trails along with pipelines going in?

A: The acquisition of the Burlington Northern right-of-way is an example of this. King County was interested in developing trails, and Cascade was interested in the property to place a pipeline. In that case, Cascade and King County helped each other.

Q: Are most water basins closed to future water rights?

A: Generally speaking, yes. However where new water sources can be shown to avoid impacts to stream flow, or where mitigation is provided for these impacts, water rights can still be granted. This may be possible for some ground water sources.

Comment: It may be beneficial to include land use in the regional/intergovernmental criteria when evaluating the portfolios.

Comment: The hope with land use is that by holding the urban growth boundary in King County, it facilitates utility planning in the future even if the population projections are not known yet.

Comment: It may be worth looking at where growth has gone in the past, not just where it is going in the future. The private holdings upstream from Lake Tapps could affect the reliability of the source.

Comment: At future meetings the map showing the transmission system of the area will be available for viewing.

Q: How are Cascade and the region planning for risks from natural and man-made disasters?

A: That will be a later iteration in planning the projects. Also, after 9/11 many of the individual jurisdictions and utilities have done extensive disaster planning. For understandable reasons, most of it is kept secret.

Adjourn and Next Steps

Regarding Lake Tapps, the purchase from Puget Sound Energy should be complete by the end of 2009. Cascade is preparing an Environmental Impact Statement (EIS) for the project. The draft EIS will be published for comment in late December or early in 2010. Cascade is working with Washington State Department of Ecology (DOE) to prepare the water rights for the project. DOE plans to publish a draft Report of Examination for comment in early 2010. The final water rights should be complete in March or April of 2010.

The next meeting is not scheduled but will probably take place in March.

Public Comment

There was no public comment.

Attendees

Working Group Members

Walt Canter
Bob James
Michael Johnson
Joan Kersnar
Leslie Lloyd
Ralph Mason
Linda McCrea
Paul Reitenbach
Lydia Reynolds-Jones
Anna Rising
Denise Smith
Sharon Steinbis
Dr. Leon Stucki
Skip Swenson
Don Wright

Board and Staff

Michael Gagliardo, Cascade Water Alliance
Elaine Kraft, Cascade Water Alliance
Andrew Graham, HDR

Facilitation Team

Lewis Michaelson, Katz & Associates
Bryan Jarr, Katz & Associates