

Draft of April 13, 2010

NOTE – This is a working document. It is designed to accomplish two objectives. First, it is an example of what one of the chapters in the CAMP might look like – at least in outline format. Second, it is an attempt to integrate and organize all of the ideas discussed to date around the issue of water supply. The Advisory Committee will need to review and refine this document as the conversation unfolds. In particular, (1) Are the Issue Statement, 50-year Vision, and Goals acceptable (and/or how can they be improved?); and (2) Which of the options/action items would the Advisory Committee like to move forward as a recommendation?

4.0 Meeting Future Demand for Water

4.1 Issue Statement

The Future Water Demand Study completed in 2010 concluded that it is unlikely that projected growth over the aquifer will create demand that exceeds the aquifer's annual recharge rate. However, because of the uncertainties of how and where future development will occur, shortages could occur in certain locations or times. Therefore, the Advisory Committee recommends that the Board consider certain measures to ensure a steady supply of water during the next 50 years. The Committee recognizes the difficulty in predicting future growth and suggests that the Board periodically review the conclusions from the Future Water Demand Study and to adapt the recommended strategies presented below as appropriate.

4.2 50-year Vision

Public and private leaders avoid a gap between water supply and demand during the period of 2010 and 2060 by achieving the following goals.

4.3 Goals and Options/Action Items

The Advisory Committee has identified four specific goals to achieve the 50-year vision for meeting future water demand -- (1) maintain a sustainable aquifer; (2) better link land use and water planning; (3) meet surface water needs; and (4) implement a comprehensive water conservation plan. The following narrative presents each goal and a set of options/action items to achieve that goal.

4.3.1 Maintain a sustainable aquifer (specifically the Rathdrum Prairie Aquifer) to provide a reliable source of water for human and environmental needs. The Advisory Committee defines “sustainable” as preventing pumping at a rate that is greater than the reasonable expected annual future recharge, also known as “mining.”

The Advisory Committee has identified the following options/action items to achieve this goal (*and in future meetings will move some of the options/action items into recommendations*).

- 4.3.1.1 Implement the adopted Rathdrum Prairie Groundwater Management Plan
- 4.3.1.2 Consider the potential effects of development and construction on the tributaries of the aquifer
- 4.3.1.3 Consider limitations on out of basin transfers of water
- 4.3.1.4 Complete the documentation and adjudication of Idaho water rights
- 4.3.1.5 Assess the effectiveness of recharge options to increase aquifer beneficial use
- 4.3.1.6 Create/support an effective water market to make water readily available when needed. Expand and enable systems for water exchange.

Recommendations – *forthcoming*

4.3.2 Better link land use and water planning. The Advisory Committee discussed the influence of land use and growth on water supply. The Advisory Committee believes that the future health and usability of the aquifer is directly linked to how land use decisions are made. Consequently, the Advisory Committee has identified the following options/action items to achieve this goal (*and in future meetings will move some of the options/action items into recommendations*).

- 4.3.2.1 Use the Kootenai Comprehensive Land Use Plan as a tool to direct water where it is available and predict how much development will occur where water is not currently available.
- 4.3.2.2 Foster interagency communications and coordination on the relationship between land and water.
- 4.3.2.3 Require that future land developments fully demonstrate that water needed for development is available without mining or degrading the aquifer.
- 4.3.2.4 Improve and/or require storm water permitting, wastewater permits, and conservation plans.
- 4.3.2.5 Determine the collective/cumulative impact of private wells, with consideration of whether private wells should have increased regulation, and the determination of how much land should be irrigated by a private well.
- 4.3.2.6 Consider what standards should be used to determine whether a sewer system should be utilized instead of septic.
- 4.3.2.7 Determine the locations where the negative effects of pumping are minimized, and encourage large, new draws on the aquifer (new developments) to those locations.
- 4.3.2.8 Acquire conservation easements on agricultural land to preserve open space and direct growth to appropriate places.
- 4.3.2.9 Consider the permitting of any new large draws on the aquifer.

4.3.2.9 Continue to use and enhance the aquifer model to inform these options/action items.

Recommendations – *forthcoming*

4.3.3 Meet surface water needs to avoid jurisdictional conflicts over lake levels and instream flows in the Spokane River. If and when the State of Washington and the Environmental Protection Agency establish TMDL's and instream flow requirements for the Spokane River, these requirements may affect the availability of water in Idaho. To mitigate and/or avoid future conflicts, the Advisory Committee has identified the following options/action items to achieve this goal (*and in future meetings will move some of the options/action items into recommendations*).

4.3.3.1 Clarify instream flow needs and the rationale for such flows.

4.3.3.2 Return treated wastewater to the system without loss to consumptive use.

4.3.3.3 Relocate present pumping to minimize negative depletive effect.

4.3.3.4 Consider options to augment streamflows in Washington.

Recommendations (*forthcoming*)

4.3.4 Implement an effective conservation plan to avoid waste and ensure that aquifer users have adequate supplies of water. The Advisory Committee believes that water consumers and users can take small steps towards conservation without undergoing massive changes or experiencing “pain” from operating in a completely new way, but the Committee also suggests that the Board or other appropriate agencies utilize voluntary, incentive-based mechanisms as well as regulatory requirements.

The Advisory Committee has identified the following options/action items to achieve this goal (*and in future meetings will move some of the options/action items into recommendations*).

4.3.4.1 Promote and support existing water conservation strategies, such as those being implemented in the City of Coeur d'Alene and the City of Post Falls.

4.3.4.2 Learn from other parts of the State and Country that have been successful in water conservation.

4.3.4.3 Promote water conservation performance standards or consider performance standards for the amount of land to be irrigated by private wells

4.3.4.4 Reuse water where feasible, with consideration to uses such as industrial consumptive (steam, etc.). Encourage water reuse plans and purple pipe.

4.3.4.5 Enforce ordinances that regulate irrigation

- 4.3.4.6 Create public outreach and school programs to encourage early support for conservation (water conservation rulers)
- 4.3.4.7 Distribute water conservative landscaping tools like wildflower seeds and native species plant lists
- 4.3.4.8 Continue programs to reimburse water users for (1) class costs for users that attend classes in Xeriscaping; (2) costs for sprinklers and hose bib timers
- 4.3.4.9 Continue partnering with facilities that need “smart” irrigation controllers installed
- 4.3.4.10 Set up community gardens with xeriscape demonstration projects
- 4.3.4.11 Provide support to senior centers with greenhouses that produce drought resistant plant starts for use in residential yards at nominal costs.
- 4.3.4.12 Continue coordination with local and regional purveyors to exchange notes and identify effective conservation steps.

Recommendations -- *forthcoming*

4.3.5 Continue monitoring, assessing, and updating future water demand. Given the 50-year vision to not exceed the aquifer supply, the Advisory Committee has identified the following options/action items to achieve this goal (*and in future meetings will move some of the options/action items into recommendations*).

- 4.3.5.1 Create a technical team to continue collecting and analyzing data to review and update the Future Water Demand Study.
- 4.3.5.1 Plan for future contracts to update the Future Water Demand Study.

Recommendations -- *forthcoming*