



Oregon

John A. Kitzhaber, M.D., Governor

file

Water Resources Department

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May 10, 1999

Roger Prowell
Public Works Department
City of Bend
1375 NE Forbes Road
Bend, OR 97701

Order Approving Water Management and Conservation Plan - City of Bend

Dear Roger,

I am pleased to inform you that the City of Bend's Water Management and Conservation Plan has been approved.

Bend is the largest city in the Deschutes Basin, an area of significant growth and complex water allocation and supply issues. Your Water Management and Conservation Plan will be a model for conservation and water supply planning in the basin. Your plan is approved so that the City can focus on completing its metering efforts. An updated plan will be required in 5 years and will be due May 7, 2004. At that time the City shall submit an update that demonstrates full metering of all accounts is complete. The updated plan shall also address the items provided in the attached work plan.

We sincerely appreciate all of the thoughtful work that went into preparation of your plan. It has been a pleasure to work with you and the Public Works Department. Please let us know what we can do to support your metering efforts or completion of your work plan by calling Rebecca Geisen at (503) 378-8455 ext. 241.

Sincerely,

Martha Pagel, Director

Attachment

c: Bob Main
Water Right File Application # G-13097, 13098

cc to Roger Beckman

City of Bend Water Management and Conservation Plan - Workplan

Additional work necessary to satisfy OAR 690-86 requirements.

1. Installation of meters on all accounts by May, 2004. The Department and Oregon Trout are concerned that the City will not meet its metering requirement in five years. The concern is that as the deadline approaches, the City will be overwhelmed by the number of meters to install. We advocate that the City more aggressively pursue city-wide metering by providing additional incentives to homeowners to join the voluntary program such as increasing flat rates for un-metered customers. The City Council should have appropriate approvals in place to complete the metering program within five years. Failure to do so could delay future water rights applications.
2. Continue to collect and refine data from metered accounts to quantify per capita average daily and peak use. Identify trends in water use resulting from metering. Water consumption data should clearly differentiate between commercial and residential accounts. Conservation measures can then more effectively be considered, evaluated and implemented.
3. Continue efforts to reduce water consumption. Water use, especially in the summer is very high. Conservation efforts should continue to focus on reducing consumption, especially for outdoor use. Non-residential accounts should also be targeted for conservation measures, especially the school districts which account for 5% of summer usage. Existing conservation measures should continue to be evaluated and monitored to see where impacts are being made. Because of all of the hotels and motels in Bend and the high occupancy rate, the City should consider promoting EPA's Wave program, aimed at reducing water usage.
4. System-wide leak detection and water audit. Once metering is complete, a leak detection and water audit program should become easier and more cost effective. Provide an update on your leak detection program and planned water audit.
5. Conservation rate structures are not adequately addressed. A more detailed explanation of your existing rate structure would be helpful. In addition, you must evaluate the adoption of a conservation rate structure and determine if it is feasible and appropriate for ensuring the efficient use of water and prevention of waste. Only by evaluating different rate structures can you determine the impacts the rates will have on water use and your budget. The AWWA has a lot of information on rate structures and our office has information as well that we would be happy to share with you.
6. Long-range water supply element needs to be updated and refined. The existing plan does not adequately compare potential sources of water from conservation, reuse and interconnection based on costs, availability, reliability and environmental impacts. An assumption is made that conservation measures will save 11%, but there is no clear

explanation of what conservation measures contribute to the reduction, nor is it clear how much individual conservation measures are anticipated to save or cost. You have a great start on this with your calculation of the reduction of capitol expenditures for ground water production due to conservation. Does this off-set the decrease in revenue from going to a metered system? This is the type of analysis that is required.

Between the May 1997 draft and the July 1998 draft Water Management and Conservation Plan, Bend's projected water needs over 20 years went from 6.7 MGD to 10.319 MGD. This is a tremendous increase. Figures used to project demand seem high. Average domestic summer demand appears high and exceeds Avion's average summer usage.

Does buildout of the UGB include areas already served by other water providers? What are possibilities for interconnections?

7. A schedule for implementation of measures needs to be included.