Proposed Action for Municipal and Domestic Water Conservation
Yakima River Basin Study/Integrated Plan

This discussion paper was drafted by HDR Engineering, for review by the Out-of-Stream Water Needs Subcommittee of the YRBWEP Workgroup.

Background

HDR prepared a memo on "bookends" for potential water savings from municipal and domestic conservation. Potential water savings from a No-Action Scenario ("Future without Integrated Plan") and a Comprehensive Scenario are shown in the table below.

Results of "Bookend" Scenarios

	Total Water Savings Potential (AFY)	Consumptive Use Savings Potential (AFY)
By year 2030		
Future without Integrated Plan:	4,000	400
Comprehensive Scenario:	20,000	5,200
By year 2060		
Future without Integrated Plan:	8,200	1,100
Comprehensive Scenario:	32,300	8,700

Summary of comments received from Subcommittee; Workgroup; and Department of Health water-use efficiency staff:

- The focus should be on outdoor water uses, since that is large and has the highest consumptive use. Changing the way people water outdoors will require a significant cultural change and won't be easy.
- Water savings won't occur unless saving water means saving money. That would require different rate structures than are currently used in most communities in the Basin.
- The starting point needs to be education of local elected officials (cities/counties), so they have a better understanding of the importance of water conservation and how it can be carried out in their communities.
- If the Integrated Plan creates new supply for municipal and domestic users, there should be conservation requirements tied to that supply.
- The consumptive use savings in the Comprehensive Scenario rely on 50% of households in the basin switching from current landscapes to very low water use landscapes. That seems unrealistically high, even as a bookend.
- The decentralized aspect of water delivery to municipal and domestic users in the Basin is a big challenge for improving efficiency.

- DOH staff believe that the state plumbing code will become more stringent in the future and require higher efficiencies.
- Don't call the lower scenario "No Action" (see terminology in table above).

Proposed Recommendation for Integrated Plan (Elements below can be selected individually, or combined):

1. Convene a locally-based **Advisory Committee** on municipal and domestic water conservation to organize outreach to local elected officials and provide liaison with Reclamation, WDOE and WDOH. Achieving effective and efficient compliance with current State requirements for water use efficiency could be a near-term objective (1 – 2 years); while generating support to go beyond the minimum state requirements could be a longer-range objective (2 – 5 years).

2. Assuming the Integrated Plan will include a block of supply for municipal use and municipal/domestic mitigation; then create **standards for access to the new supply**. For example, to be eligible for access to the new supply, communities would need to:

    - implement rate structures that encourage water conservation;
    - Meet targets (to be defined) for reducing residential water use per capita by 2020 and 2030 (note it is much easier to define a standard for household use than for commercial and industrial use);
    - Meet the State-required standard for water loss of 10% or less; and/or
    - offer a comprehensive menu of conservation program options for their customers or constituents.

3. As part of the Integrated Plan, **create a fund** to promote water use efficiency basin-wide using voluntary, incentive-based programs. Focus on outdoor uses as top priority. Funding would need to be on the order of $0.5M to $1.5M per year in order to make substantial progress.
    - **Option 1**: Administer basin-wide to gain economies of scale.
    - **Option 2**: Competitive grants to local communities for their own programs.

    (Under either option, contracting with outside organizations having expertise in this area (WSU, AWWA, etc.) could help to provide information resources and technical support.)

    If such a fund is created, also establish a basin-wide goal for water savings in terms of consumptive use. E.g. by year 2030 achieve 10,000 acre-feet per year in total water savings (2,500 AF consumptive).