

Section 7

POTENTIAL REGIONAL SOLUTIONS

The previous section identified local utilities where additional supply capacity will be needed before 2020. Although most individual utilities with projected supply shortfalls have specific plans to meet their needs at a local level, additional subregional and regional water supply options (including conservation, conventional supply options, water reuse, and other options) warrant consideration as they can be more cost-effective, benefit more people, and may help restore fish populations by improving fish habitat. Regional solutions may also help address longer-term needs to provide adequate water supplies for future generations.

An example of a subregional solution that benefits multiple utilities and fish is the Tacoma Second Supply Project, which will be developed through a partnership of Tacoma, Seattle, Kent, Covington Water District, and Lakehaven Utility District. Environmental benefits of this project include, but are not limited to, increased summer minimum flows in the Green River to benefit Chinook and the potential for Green River water to offset diversions from the Cedar or South Fork Tolt Rivers. The Second Supply Project also provides an upstream passage facility at the diversion dam that will enable the movement of adult salmon into the upper watershed, where they have not been since 1911.

As part of the Outlook effort, the Forum convened four workgroups to engage a variety of stakeholders in identifying alternative supply options to address future water supply issues. The workgroups were brought together to obtain input from diverse parties on the regional aspects of conservation, conventional supply options (on both a regional and local scale), water reuse, stormwater, and institutional constraints and issues that limit the ability of water suppliers to implement these options. These workgroups are discussed below, and the results of their work are presented in Sections 8 through 12.

Future Regional Supply Options

Potential regional supply options have been assessed by the four workgroups described above. This section introduces each of the four workgroups, describes the nature of their assessment of future region-wide supply options, and describes the stakeholder groups who were involved. Assessment of these regional supply options are presented in Sections 8 through 12 in the following order:

- **Options for Increased Conservation (Section 8)** – Discusses the potential for enhanced conservation efforts to reduce future water supply needs and to supplement conventional supplies, and describes regional conservation scenarios.

- **Conventional Supply Options (Section 9)** – Provides a comprehensive list of potential conventional regional supply options (e.g., new sources, additional use of existing sources, water storage, interties).
- **Reuse Options (Section 10)** – Discusses the potential for implementing more wastewater reuse projects to offset potable water demands, and identifies specific wastewater reuse opportunities across the region.
- **Stormwater Options (Section 11)** – Discusses the potential for using stormwater management options to supplement municipal potable water supply either directly or by offsetting municipal water demands and identifies specific stormwater management opportunities with water supply benefits across the region.
- **Barriers to Meeting Municipal Needs (Section 12)** – Identifies the institutional constraints and management issues limiting development of a sustainable water resource management program.

Supply Option Workgroups

Conservation Workgroup

The conservation scenarios presented in Section 8 were developed by the Conservation Workgroup, which included representatives of water suppliers, the environmental community, landscape and irrigation industry, and other stakeholder groups, state agencies, and county governments.

At the outset, the Forum provided a general framework for preparing the conservation scenarios. Based on this framework, the workgroup developed a detailed approach to building scenarios, identified options for quantitative levels of water savings, and developed the scenarios themselves. Members of the Conservation Workgroup are listed in the Acknowledgements pages.

Conventional Supply Options/Institutional Constraints Workgroup

The Conventional Supply Options/Institutional Constraints workgroup was established to identify regional, conventional supply options and address institutional issues that may constrain implementation of those options. This group was formed with volunteers from interested stakeholders and water utility representatives who wanted to be involved in the regional water supply planning process. The workgroup consists of representatives from regional water associations, water utilities, the Washington State Departments of Ecology and Health, King County, and the League of Women Voters, all of whom worked collaboratively to identify water supply options and present information regarding those options in a consistent form. Members of the Conventional Supply Options/Institutional Constraints Workgroup are listed in the Acknowledgements pages.

The workgroup compiled a comprehensive list of potential regional supply options and summarized those water supply options in a consistent format so that comparable information is presented for each option (see Section 9). Several generic supply options (e.g., desalinization and storage impoundments) that could be implemented in the Puget Sound area, but are not currently proposed by a utility, are also discussed.

The workgroup also compiled a list of the most significant institutional constraints faced by utilities, local governments, and other stakeholders to developing a sustainable water resources program. These constraints and potential solutions are described in Section 12.

Water Reuse Workgroup

The Reuse Workgroup included representatives of water suppliers, stakeholder groups, state agencies, and county governments. Members of the Water Reuse Workgroup are listed in the Acknowledgements pages. At the outset, the Forum's Water Supply Planning Committee provided a framework for preparing the reuse status report. Based on this framework, the workgroup provided the information in Section 10 that: 1) describes the current status of use of reclaimed water in Snohomish, King, and Pierce Counties; 2) documents issues associated with reuse; and 3) assesses the water reuse potential in the three-county area.

Stormwater Workgroup

The Stormwater Workgroup has compiled a list of potential stormwater management options that could benefit water supplies (Section 11). Using information provided by various sources, a profile for each stormwater management option was prepared, including an overall description of the option and a more specific description based on a series of technical, environmental, legal, financial, and political criteria. Members of the Stormwater Workgroup are listed in the Acknowledgements pages.

