



TECHNICAL MEMORANDUM: TUALATIN RIVER EVALUATION CRITERIA

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INTRODUCTION

Evaluation criteria will be used in the WSFS to compare and evaluate source options and water supply alternatives. The criteria will be applied initially in order to screen and eliminate source options that will not be considered as part of a long-term water supply strategy for the Tualatin Basin. Following the source options screening process, criteria will be used to evaluate and compare multiple planning alternatives for their ability to best satisfy the criteria set.

Criteria will not be applied quantitatively to source options and planning alternatives. That is, numerical or ordinal rankings will not be performed as part of the evaluation process. Rather, source options and alternatives will be evaluated qualitatively for their ability to meet the evaluation criteria. Descriptive discussion of the options relative to the criteria will be developed. The exception to this qualitative approach is cost. Planning-level cost estimates will be developed as part of the WSFS.

Material from the Integrated Water Resources Management Plan (Montgomery Watson, 2001), the Regional Water Supply Plan (Regional Water Providers, 1996), Water Source Options Study (CH2M Hill, 1992) and the Regional Transmission and Storage Strategy (Montgomery Watson, 2000) was reviewed for information relating to key issues and evaluation criteria. Draft evaluation criteria were reviewed by the WSFS Partners and stakeholder groups.

EVALUATION CRITERIA

The individual criteria are stated, along with specific aspects of the criterion that will be considered in the evaluation process. Criteria are listed in random order.

Cost. Minimize the cost of source development. Minimize the cost of transmission, pumping and ancillary facilities.

Cost allocation. Maximize the perceived fairness of cost sharing among water users. Maximize partnerships that leverage local resources.

Institutional and financial feasibility. Minimize the magnitude and difficulty of required institutional changes. Minimize the difficulty of reaching agreement on regional and local control issues.

Legal and regulatory feasibility. Minimize legal and regulatory obstacles. Maximize ability to meet local and regional goals, standards and requirements.

Supply Reliability. Defined as shortages due to lack of supply and/or infrastructure required to serve demand. Minimize future daily and seasonal shortages, including the magnitude, frequency and duration of shortages and the number of water users affected.

Emergency Reliability. Defined as shortages due to catastrophic events resulting from unexpected failure of supply and/or infrastructure. Minimize future shortages, including their frequency, magnitude and duration and the number of water users affected.

Efficiency. Maximize the use of current sources before developing new ones.

Water quality. Meet regulatory standards for drinking water. Maximize the consistency of water quality in the Tualatin River. Minimize adverse water quality impacts within the transmission and storage system.

Recreation. Minimize adverse impacts to recreation in the Basin. Maximize opportunities for recreation.

Flood control. Maximize opportunities to provide flood control for Tualatin Basin. Minimize contribution to existing flooding problems.

Environmental Impact. Minimize adverse environmental impacts of source development, as well as transmission and ancillary facilities. Maximize environmental benefits.

Timeliness. Maximize ability to meet projected demands at the time they are needed, including immediate local needs.

Property rights. Minimize adverse impacts to property rights.

Security. Maximize the ability to protect supply from intentional harm.