New Report Highlights Advantages of the Agreements to Support Healthy Rivers and Landscapes Over 55% Unimpaired Flow Scenario

MBK Engineers conducted a technical review of California's Draft Staff Report/Substitute Environmental Document, focusing on potential updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The report addresses key issues related to water management and highlights crucial considerations for government officials.

KEY FINDING:

The Agreements to Support Healthy Rivers and Landscapes (HRL) (known as <u>Voluntary Agreements</u> or VAs) Deliver More Benefits with Fewer Impacts than the 55% Unimpaired Flow Scenario

BENEFITS AND IMPACTS OF VOLUNTARY AGREEMENTS VS 55% UIF SCENARIO

0		Voluntary Agreements Alternative	55% Unimpaired Flow Scenario	-
• •	Tributary Salmonid Habitat	Benefits	Neutral	
X	Terrestrial Habitat	Neutral	Adverse Impacts	
	River Temperatures	Neutral	Adverse Impacts	
*	Reservoir Storage	Neutral	Adverse Impacts	
÷,	Water Supply	Neutral*	Adverse Impacts	6 28 6 28
*Tho \/A	Altornative bas impacts to water suply to	provide the flow assets but the impa	cts are manageable as	Well by the

*The VA Alternative has impacts to water suply to provide the flow assets, but the impacts are manageable as compared to impacts under the 55% UIF scenario.



BETTER HABITAT FOR SALMONOID SPAWNING

The HRL Alternative offers environmental benefits like improved habitat for salmonoid spawning and rearing on the American, Feather, Sacramento, and Yuba Rivers compared to the 55% Unimpaired Flow (UIF) scenario. Notably, spawning habitat more than doubles on the American River and triples on the Sacramento River compared to the UIF scenario. Separate modeling conducted by the Department of Water Resources paints a compelling picture: under the HRL Alternative, Delta outflow significantly surpasses projections outlined in the Draft Staff Report. Moreover, the MBK Engineers' summary of CalSim 3.0 modeling underscores a critical oversight: the Draft Staff Report significantly underestimates the HRL Alternative's benefits based on Delta outflow, leading to a skewed representation of its potential effects.

REPORT IDENTIFIES CHALLENGES WITH UIF REQUIREMENTS:

The report details profound challenges associated with UIF requirements, highlighting their potential to disrupt water infrastructure functionality and supply management principles statewide. The imposition of UIF requirements not only compromises existing infrastructure, including the Central Valley Project and State Water Project but also threatens the fundamental tenets of water supply management in California. Implementing UIF requirements of 45 to 65% could lead to significant adverse impacts, particularly concerning water infrastructure functionality and water supply management principles in California.



California's water infrastructure was designed to manage the state's seasonal fluctuations, such as wet winters and dry summers, and variable precipitation patterns. The unimpaired flow concept restricts reservoir functionality, hindering reservoir's ability to shift water availability over time, directly contradicting California's water supply management principles.



On the American River, 55% UIF requirements exceed existing April and May flows by about 50 TAF/month, surpassing the total demands of approximately 25 TAF/month. This discrepancy necessitates reductions in Folsom storage diversions, adversely affecting drinking water supply, recreation, habitat, temperature management, and hydropower capabilities.



Climate change exacerbates strain on water supply systems. Earlier peak runoff shifts increase reservoir inflow during flood management operations, complicating reservoir filling during wet years. This, combined with UIF requirements, leads to water shortages and management challenges in most years.

A CALL FOR HOLISTIC WATER POLICY

Effective water resource management in California demands a comprehensive approach—one that considers the complex interplay between regulatory requirements, infrastructure capabilities, and environmental imperatives. Addressing the gaps highlighted in the technical review is essential for developing sustainable water policies that meet the diverse needs of California's communities and ecosystems.