

WATER SUPPLY PLANNING AND PERMITTING

HSW Engineering, Inc. (HSW) has been performing water supply planning and permitting since its inception in 1988. HSW is staffed with licensed professional engineers, geologists, and scientists. Our staff understands the multiple functions state's fresh and estuarine water resources provide, and recognize the unique challenges associated with supplying water for beneficial use without adverse impact to the environment or other legal water users.

Thoughtful and innovative planning for economical and sustainable water supplies is critical not only to our clients but also to the state and national economies. For over 23 years, HSW has been actively engaged in the planning and permitting of water use and the related issues of withdrawal, storage, treatment, delivery, reuse, conservation, and ecosystem protection.

HSW's integrated team of professionals is experienced working with industries (such as mining, power generating, and food processing), municipalities, regional water suppliers, agricultural interests, mixed-use developments, and individuals. HSW has worked with a number of clients to evaluate and implement water-saving, best management practices (BMPs) and supplemental alternative lower-quality water sources.

Climate cycles influence the availability and quality of our water resources. HSW is widely recognized for its scientific work supporting Minimum Flows and Levels Program, experience that is particularly relevant to potential impacts of water supply and offstream storage on instream flow needs.

Related Services Offered by HSW:

- Water Use Permitting and Negotiation
- Compliance and Consent Order Support
- Hydrologic and Hydrogeologic Analysis
- Aquifer Performance Testing
- Hydrologic, Water Quality, and Environmental Monitoring and Reporting
- Water Testing and Analytical Laboratory Data Validation
- Groundwater and Surface Water Modeling
- Water Quality and Thermal Mixing Modeling
- Watershed Management Planning
- Environmental Analysis (NEPA and state-level compliance documents)
- Instream Flow-Needs Assessment
- Endangered Species Analysis and Permitting
- Alternative Supply Evaluation
- Water Demand Projection
- Water Treatment System and Residuals Assessment
- Process / Facility Water Balance Analysis
- Chemical Mass Balance Analysis
- Water Distribution System Design and Evaluation
- Well Design and Rehabilitation
- Pump Design and Energy Audit
- Electronic Control System / SCADA Design
- Irrigation System Design and Construction
- Water Conservation and BMPs
- Environmental Mitigation / Restoration
- Stakeholder Support

