



**SB 839 Matrix to Select Methods for Development of Seasonally Varying Flow Prescriptions**  
 FOR **above and below ground** water storage projects **that require** a water right authorization **and** are **seeking** SB 839 funding,  
 AND that are: impounding on a perennial stream, **or** diverting from a stream supporting STE species, **or** ≥ 500 acre feet...

The project will need a **Seasonally Varying Flow Prescription**, determining **the duration, timing, frequency and volume of flows, (including ecological baseflow) necessary for protection and maintenance of biological, ecological, and physical functions.**

**How Hard Would One Have to Work to Develop an SVF Flow Prescription?**  
 For each **Key Question**, identify the **Resulting Key Question Score** using the matrix at left; then identify likely **Resulting SVF Study Methods** for each **Resulting Key Question Score** using the matrix below.

	Key Questions	Questions to Discern Availability of Information (Circle Y or N for each question)	Availability of Information Score Y = Sufficient N = Insufficient	Questions to Discern Impact of Project (Circle Y or N for each question)	Impact of Project Score Y = Significant N = Minimal	Resulting Key Question Score Combine "Availability of Information" and "Impact of Project" scores; e.g. "Sufficient, Minimal"	Resulting Key Question Score	Resulting SVF Study Methods (see narrative Step 6 for details)
Biological Band	①	Is there sufficient information* about: <b>all</b> species present at/below the point of diversion and their lifecycle needs? (Y/N)		Is this project diverting from a stream supporting sensitive, threatened, or endangered species? (Y/N)			Sufficient, Minimal	<b>Data Collection:</b> Field visits, and/or literature/ expert review  <b>Analysis:</b> Existing models and/or calculations
Hydrological Band	②	Are there sufficient long-term data* to understand the natural hydrograph? (Y/N)		Is the project requesting an amount of water ≥ 50% exceedance analysis? (Y/N)			Insufficient, Minimal	<b>Data Collection:</b> Field work, field visit, and/or literature and expert review  <b>Analysis:</b> Develop models, scientific expert workshop, existing models and/or calculations
	③	Is there sufficient information to <b>understand climate driven shifts</b> to the flow regime? (Y/N)		Is the project requesting an amount of water ≥ 50% exceedance analysis? (Y/N)				
	④	Is there sufficient information* about water availability? (Y/N)		Is the project requesting an amount of water ≥ 50% exceedance analysis? (Y/N)				
Hydraulic / Physical Processes Band	⑤	Are there habitat studies that provide sufficient information* to understand the relationship between selected habitat features and streamflow? (Y/N)		Is the impoundment located in-channel or does it have an impact on sensitive habitat/process? (Y/N)			Sufficient, Significant	<b>Data Collection:</b> Field work, field visits, and/or literature review  <b>Analysis:</b> Develop models, scientific expert workshop, existing models and/or calculations
	⑥	Are there geomorphological studies or data that provide sufficient information* to understand the relationship between sediment transport and streamflow? (Y/N)		Is the impoundment located in-channel or does it have an impact on sensitive habitat/process? (Y/N)				
	⑦	Are sufficient* stream data available to describe stream complexity and floodplain connectivity? (Y/N)		Is the impoundment located in-channel or does it have an impact on sensitive habitat/process? (Y/N)			Insufficient, Significant	<b>Data Collection:</b> Field investigations/study, scientific expert workshop, field work, field visits, and/or literature review  <b>Analysis:</b> Develop models, scientific expert workshop, existing models and/or calculations
	⑧	Are sufficient* water quality data available, particularly related to temperature? (Y/N)		Is the impoundment located in-channel or does it have an impact on sensitive habitat/process? (Y/N)				

\* "Sufficient" information means enough **scientific information collected using standard biological, hydrologic, or hydraulic methods** to develop **the recommended** flow prescription. As the proposed project increases in water requested relative to water available, risk to ecosystem functions, and complexity, so too will the level of detail necessary to develop a flow prescription. Level of effort creating a flow prescription should correspond to how the project relates to its biological and physical setting. This approach responds to the economic feasibility realities noted in SB 839.