The Healthy Streams Partnership (HSP) is intended to promote a paradigm shift from concentrating only on negative (impaired streams) to a more positive (healthy streams and how to keep the stream healthy) approach. The HSP supports hypothesis driven data collection, analysis and reporting to provide more useful and more integrated information. Finally, it is about coordinating among water quality data generating organizations to increase the rigor of our assessment capacity and to provide more contextual information to managers and decision-makers who may have an impact on stream conditions.

This paradigm shift requires a change in how we monitor, how we assess, and what tools we use. The emphasis is on identifying what is good about a stream. The State Water Board’s Surface Water Ambient Monitoring Program (SWAMP) is developing and implementing the programs and tools to support the necessary framework to reshape our statewide monitoring effort. (Right now the “our” is predominantly the State and Regional Board SWAMP, but the goal is to form partnerships to extend the consistent and comparable approach). The HSP effort is about including and synchronizing as many monitoring efforts as possible, striving for compatibility and comparability, and emphasizing the need for monitoring to be hypothesis driven, in support of statewide adaptive management effectiveness.

Recognizing that “health” is a policy term, and “condition” a term of technical and scientific basis, a major role of HSP is to make useful connection between the two. A functioning partnership should be a mechanism to convert the distributed data and analyses now available into actionable knowledge for more direct use in decision-making. It can do so by more effectively utilizing existing data, information and capacity among the many agencies and organizations concerned with various elements of stream systems.

To generate an inventory of methods most likely to be used and enhanced, a wide variety of stakeholders was interviewed. They included local, state and federal agency personnel, land managers, local government officials, not for profit organizations, and legislators. The following is a summary of the most frequent observations and questions, and a brief summary of suggestions received regarding each question.

Major questions from respondents:

A. “What are the relationships among SWAMP, The Monitoring Council, the “My Water Quality” portals, the State Water Plan, the State Fire Plan, and various other monitoring and reporting programs of other state agencies?”

Many (if not most) of the non-agency people were intrigued and interested in the Healthy Streams Partnership idea, but were somewhat confused by how it fits into or with other programs and projects they know about.

A general, easy-to-read chart or short narrative that compares and connects them would be well received.

B. “How can we apply the information available in a meaningful way to change things in our local area? Are there any programs to assist with decision analysis for potential outcomes relative to stream health and water quality in general, such as decision support software?”
There is a widespread desire for the HSP to include more aggregated analysis of whole system conditions. Local governments and private landowners in particular, would like some additional assistance in determining overall “health” of a given stream, and to aid a better understanding of inter-relationships among system components. There is an expressed desire for readily available analysis tools that could help inform management through modeling, outcome projections, etc.

There were many requests that the HSP provide a library (or library of connections) that outlines currently available Best Management Practices that have proven effective. In addition, it was frequently noted that, while there is a good deal of information about pieces of a stream system, there is very little information of what it all means on a whole-system basis. Many felt that, although can get test results from a range of specialists in great detail, they are still not be sure of how healthy and resilient a given stream system is overall.

C. “As a sister agency, how can we supply information without undue additional workload beyond what we are doing now?”

It was regularly noted that the easier it is for existing data to be readily brought into the HSP system, the more likely it is to obtain access to data. SWAMP is an excellent tool to move in that direction, and may need to be augmented with additional translation tools and algorithms.

Aggregation within a spatial scale of watersheds, or a context scale of a whole stream system, will require some sort of quantified relational description among the parts and pieces, and some upfront work to normalize information to better enable the discovery and articulation of emergent system characteristics.

D. “What assistance is available to help with using this information in decision making and implementation at a local level that will propel our streams systems toward a more productive state?”

A common note among interviewees was that, while lists of assistance and program support are available sporadically, there may be use in compiling a substantial “help available” page with details on each source, and a code-based search mechanism to help find the most appropriate assistance at a local scale.

E. “When/how will there be funds available to maintain and enhance stream systems, instead of only fixing them once they have slipped below regulatory thresholds?”

This question was a common one, and is important to the overall success of the Partnership in improving stream health. Widespread recommendation was that the HSP provide leadership in designing and generating fiscal help through combinations of existing funding, campaigning for additional sources, and publicizing successes.

Overall, there is widespread support and stated need for the HSP. In particular, local elected officials and planners were markedly similar in their comments. They would like to see state information and data available, not only directly, but also in the form of analysis and aggregation to improve the impacts of local decision making and policy establishment. They would also like to see the program include various support functions, including decision support functions; customized reporting; clearly described relationships with other connected processes, and; provision of feedback and investigative aspects that will allow interaction with water quality specialists.

As was the case at many levels, most were seeking some larger scale view of the whole network of programs, agencies, plans, etc., that have some direct interest in stream system health and water quality. They would also like a clear description of how the different programs, etc., link (or don’t link) with each other, including the US EPA Healthy Watersheds Program that is a “. .concept based on a holistic systems approach to watershed protection and conservation. Maintenance of aquatic ecological integrity requires that we understand, not only the biological, chemical, and physical condition of waterbodies, but also critical watershed functional attributes, such as hydroecology, geomorphology, and natural disturbance patterns.”