

CV-SALTS Subcommittee Meeting



Salt and Nitrate Source Study Knowledge Gained Subcommittee

When: Wednesday, April 6, 2011 at 9:00 AM - 10:30 AM

Location: Conference Call Only

Conference #: (218) 339-4600 Participant Code: 927571#

Agenda

1. Welcome and Introductions
2. Review and discuss draft documents and efforts to complete them
 - Straw Ideas Document Review and Revise
3. Next Meeting/Call

Progress Goal: Framework developed for salt/nitrate identification studies (Assess the validity of the salt source survey pilot studies. If the approaches need modification, identify the adjustments that will be made to make the approach useful in the rest of the region.) [from Knowledge Gained Subcommittee]

Schedule: April

Straw Proposal (for discussion):

Premise: salt/nitrate load information is isolation is not adequate information.

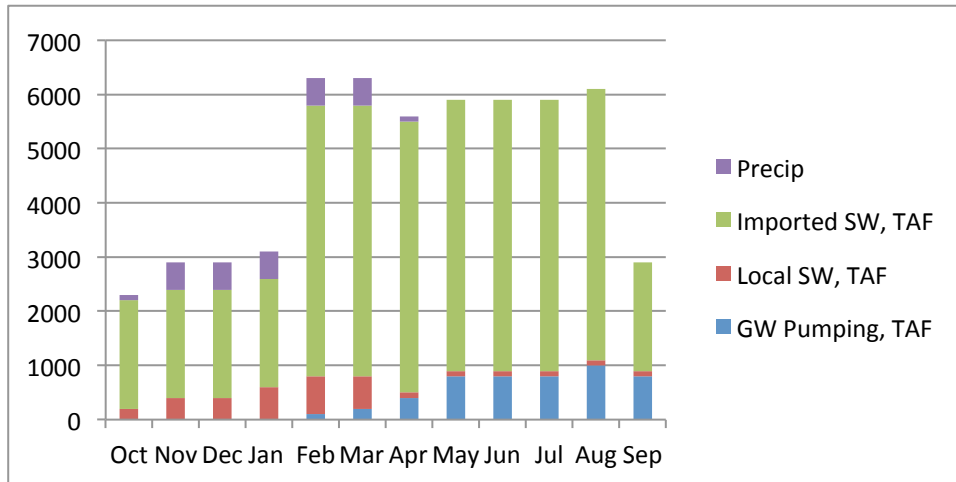
Suggestion: Reframe Technical Criterion as Salt/Nitrate Identification Study Questions.

Salt/Nitrate Identification Study Questions

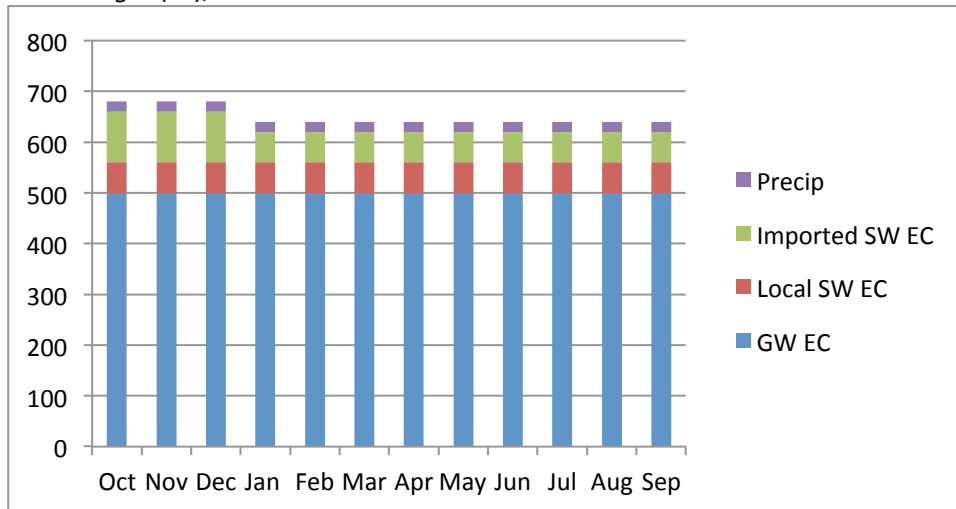
1. Develop a basic conceptual model that describes
 - a. salt/nitrate sources and sinks,
 - b. salt/nitrate paths of movement from source to sink,
 - c. areas of salt/nitrate accumulation, and
 - d. employs a clearly defined control volume to accomplish the regional water budget and salt/nitrate load balances
2. The conceptual model must include a regional water budget that
 - a. Describes source quantity, quality and timing, and supply demand patterns (by timing and use);
 - b. characterizes fate and transport of water; and
 - c. lists critical influences on regional water management.
3. Determine if the regional water budget and total salt/nitrate mass loads individually balance and clearly communicate the results Use the regional water budget to examine salt and nitrate concentrations through the water supply chain.
4. Identify regulatory requirements, beneficial uses, and local planning objectives pertaining to salinity and nitrate within the region and consider their impact within the study components.
5. Determine the salt/nitrate mass loading rates of each source and clearly present a written and graphical comparison of source loads.
6. If possible to quantify sufficiently, conduct trend analyses of historical and projected salt/nitrate loads for each source .
7. If salt/nitrate is accumulating within the region, does the study determine the locations and rates of accumulation?
8. Translate the salt/nitrate mass loading rates into corresponding water flow volumes and salinity/nitrate concentrations so the loading rates can be put into a regional context to allow prioritization of management options.
9. Determine or estimate salt/nitrate assimilative capacities of groundwater and surface water bodies within the region.
10. Determine if salt/nitrate loadings are characterized in sufficient detail to inform control strategies.
11. Clearly describe the methodology used to conduct the study.
- 12.
13. Identify data gaps.
14. Validate data and clearly describe validation methodology.
15. Determine whether the data relied upon in the study sufficient and of high enough quality to answer the above questions with an acceptable degree of confidence.
- 16.

Suggestion: Give examples of good visualization of study output. For example, (*I made these up based on what we are looking at doing for the Westside Salt Assessment*):

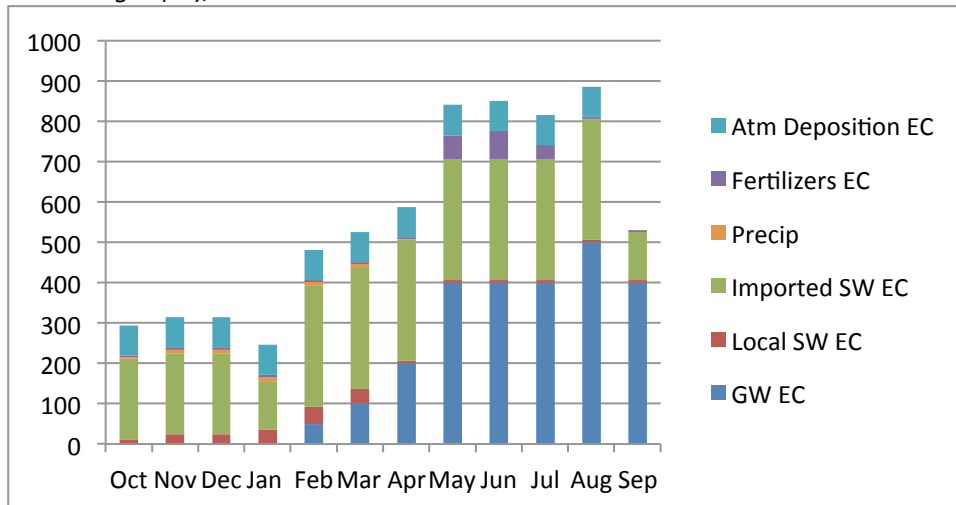
Water Budget (IN):



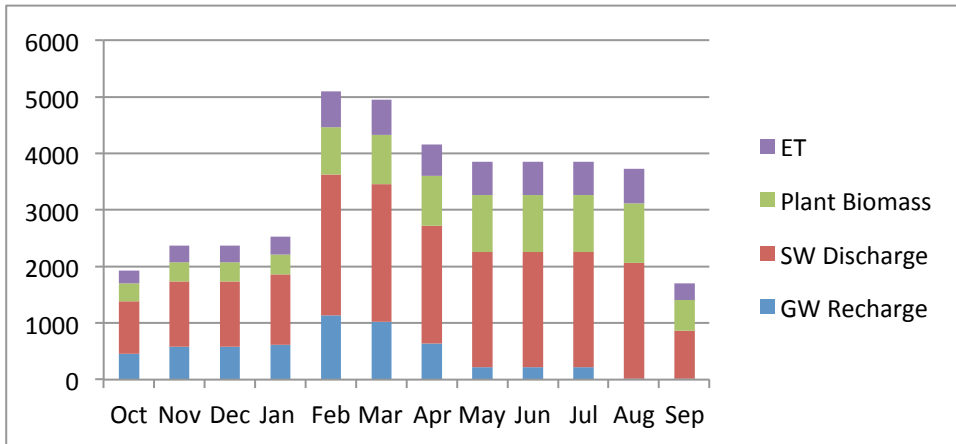
SALT Budget (IN), concentrations:



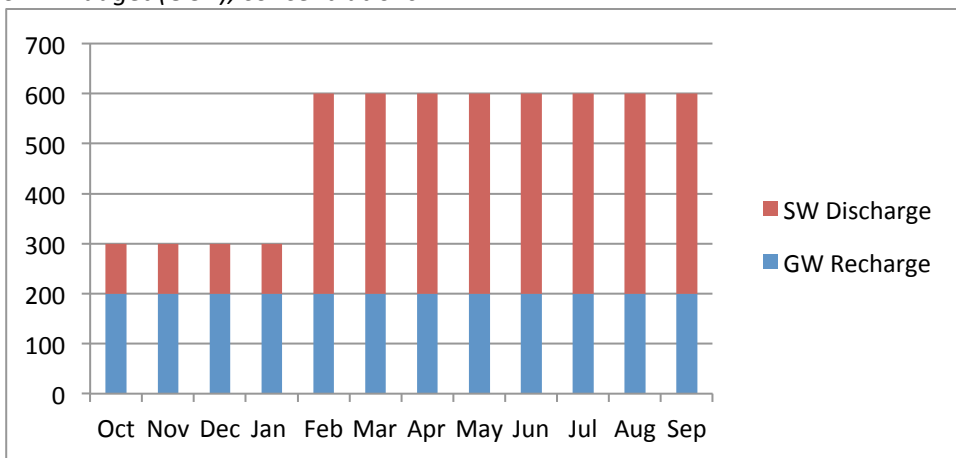
SALT Budget (IN), Loads:



Water Budget (OUT):



SALT Budget (OUT), concentrations:



SALT Budget (IN), Loads:

