



DELTA STEWARDSHIP COUNCIL
DELTA SCIENCE PROGRAM

CDFW
Watershed Restoration
Grants Branch



*The Delta Science Program, the CDFW Watershed Restoration Grants Branch,
and the Surface Water Ambient Monitoring Program Jointly Present a Brown Bag Seminar Series*

Delta Nutrients: Sources, Sinks, Sags, Soups, and Sensors

One of a series previewing the upcoming *State of Bay-Delta Science 2016*

Wednesday, October 5th
Noon to 1:00
Park Tower Plaza
2nd Floor Conference Room
980 Ninth St., Sacramento, CA



featuring

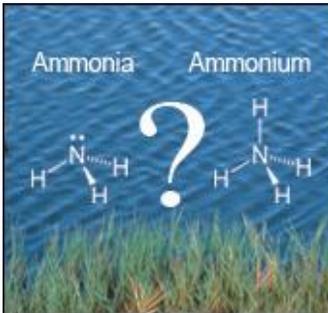
Cliff Dahm, Ph.D.

Delta Stewardship Council
Delta Science Program
Lead Scientist

Increasing water clarity, the emergence of harmful algal blooms, the proliferation of aquatic water weeds, and altered food webs have brought the issue of nutrient dynamics to the forefront in the Delta.

Nutrients, such as nitrogen (e.g. ammonium) and phosphorus can be beneficial, or detrimental to water systems, depending on the type and levels of accumulation. In the right amount, nutrients can promote healthy plant and animal growth. However, high levels of nutrients can cause water quality concerns and negatively alter the food web.

Dr. Cliff Dahm's career has focused on nutrient biogeochemistry in aquatic ecosystems. In this Brown Bag Seminar he will weave some insights from past research in other aquatic ecosystems with the nutrient studies that are ongoing in the Delta.



Ammonia (NH₃)
is the un-ionized
gaseous form,
and difficult to measure.

Ammonium (NH₄⁺)
is the positively charged
ion form,
and is easily measured.

Courtesy: Cliff Dahm



The *State of Bay-Delta Science (SBDS) 2016* is a collection of papers that summarizes the scientific understanding of the Sacramento-San Joaquin Delta. It will include a report by Dr. Cliff Dahm on nutrients, and their effects on primary producers and water management decisions. The report will be available later in 2016 via the San Francisco Estuary & Watershed Science journal: http://escholarship.org/uc/jmie_sfews

For more info: Nir Oksenberg, (916) 445-0715, nir.oksenberg@deltacouncil.ca.gov

[Please click here](#) for instructions on how to watch via WebEx