Matt Dekar Use Cases for Jersey Point

Hi guys,

I am not familiar with standards for communicating use cases but hopefully the following examples provide some insight regarding the data:

1) (Near) real-time monitoring:  Typically we provide our catch data to the Delta Operations for Salmonid and Sturgeon technical team via our daily or weekly DatCall (example attached).  Operational triggers for the Delta Cross Channel or exports are based on the presence or absence of species of management concern within our seine and trawl sites.  Considering the scope of work is focused on Jersey Point, it will be important to display catch per effort for Chinook Salmon (all races and origin, i.e. hatchery or wild), Steelhead (by origin), and Delta Smelt.  Ideally, the user could examine catches from individual tows (typically 10-20 tows are conducted each day) or the user could average the catches across the full effort within a day.  Jersey Point is actually divided into lanes (north, middle, south) with very different catch patterns so it would be nice to have the flexibility to calculate daily averages within and across lanes (effort is not distributed equally among lanes).  We need to distinguish between no effort, no catch despite effort, and catch!  Note: the drought operation monitoring plan for salmon and smelt require additional monitoring at Jersey Point this year.  The study design actually calls for sampling at Jersey Point and Prisoner Point (alternating between sites each day).  We need to clarify with SFCWA/MET that they want data from both sites on the portal.

2)  Retrospective analysis:  Hopefully we will be able to expand (in space) beyond Jersey Point in subsequent iterations on the portal.  To understand conditions in the Delta, it would great if we could compare catches among sites and through time.  For example, how many fall run Chinook Salmon were captured at Jersey Point (San Joaquin) compared with Sherwood Harbor (Sacramento Trawl) and how many individuals were exiting the Delta at Chipps Island?  The requirements will be the same as #1 above, the user will need to be able to summarize the catch per effort data for species of management concern from daily (individual tows, daily average) to weekly (average), monthly (average) and yearly (average) time scales.  Within a site, it will be important to show catch patterns through time.  For example, when was the peak(s) outmigration of winter-run Chinook Salmon and what were the environmental conditions.  Ideally, the user could examine the environmental data sampled concurrently with the trawling effort (particularly water temperature, turbidity, and conductivity).  It would also be good if the user could pull flow data from Dayflow.

I am attaching the presentation that I gave at the July CEMW meeting.  The only concern that was voiced is that the user could examine data from individual tows (daily variation is important).

Hope this helps and I can add more details this week if necessary (I am home but the baby will sleep eventually!).

Thanks!

Matt