Hydro Team Plan – Siegel/Nelson – Sept 11, 2017

Goals:

 Create backbone hydrographic data set for EXPORTS ship sampling

 Coordinate with Chief Scientist / Data Manager on event logs, sample metadata, etc.

 Focus on building proxies, not sampling every bottle

 Provide NRT data for adaptive sampling

Tasks:

1. Manage CTD profiles (merge task with the UVP/LISST work)

Create processed CTD files (1m bin), full resolution & bottle files, with simple NRT proxies included (e.g. chlorophyll fluorescence to chl, etc.)

 Need data bosses (Stuart / Andrew’s Tech & CS’s to do the other shift)

 Total berths = 1 / ship

2) Discrete sampling

Sample from the CTD (DO, DOM, C/FDOM, Nuts, FlChl, HPLC, ap, POC/N, BSi, PIC, genomics)

Assume Nmax = 4 casts per day with sampling

Berthing minimum - need 5 / ship (2 Large Volume, 2 Small Volume & 1 DO/ Chl person) – assuming two shifts

A sample cop is needed per ship to oversee the operation – Norm for survey? – Nathalie Guillocheau UCSB staff for process)?

Run at sea (FlChl, DO, CDOM?)

 FlChl - UCSB has one Turner – need 2nd  (borrow from FSG?)

 DO – UCSB has one Winkler (Carlson lab) – need 2nd?

 CDOM – UCSB has one UltraPath (may collect and ship home?)

Run on shore (the rest)

Policy for analysis by cast type – noon time, PP collect, AUV calibration, experimental t\_0

N\_max = 1000 for both ships (many analyses are budgeted at ½ that)

3) C-OPS noon time casts on both ships

 Need both of UCSB’s C-OPS

Berthing will be Stuart / Andrew’s Tech with some deck help needed (FSG on survey ship)

Total Berthing:

Overall we need minimum 5 per ship with help. Stuart / Andrew’s Tech can help out with the IOP profiling from the survey ship – or filter!! UCSB can come up with some of the needed hands but probably not all.