Clallam Conservation District
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AGENDA

Pollution Identification & Correction Planning Meeting
1:00 – 3:00 PM, January 23, 2014
Clallam County Courthouse - Little EOC training room in basement of Courthouse
(Room 071, west of the stairway, 2nd door on the right)

1:00 – 1:05 Introductions

1:05 – 2:30 Clallam County Water Resources Database – Ed Chadd

- Database structure
- Compatibility with the State's EIM database
- Metadata
- Entry forms
- Possibility of web-based data entry
- Reports
- Questions and Answers

2:30 – 3:00 Database Needs for PIC Program – Jen Bond

- Trends monitoring database needs
- PIC projects targeted monitoring database needs

Next PIC meeting: **Thursday, February 27rd; 1:00-3:00PM at Sequim Library**

Notes - **PIC Planning Meeting**

Date – **January 23, 2014; 1:00-3:0pm at Clallam County Courthouse**

Attendees – Ed Chadd (SK), Arthur Frost (SK), Marilyn Harbaugh (SK), Jennifer Bond (CCD), Joe Holtrop (CCD), Donald Hatler (CCD), Hansi Hals (Jamestown Tribe), Robert Knapp (Jamestown Tribe), Douglas Ridgeway (WSU Master Gardeners) , Janine Reed (CCEH), Carol Creasey (CCEH), Andy Brastad (CCEH)

Ed Chadd (Streamkeepers, SK) gave a PowerPoint presentation on the Clallam County Water Resources (CCWR) Database. This is an Access database.

- Data collection began in 1985-1986 through the CCEH and initially recorded with paper files. Eventually data was recorded in spreadsheets.
- SK program began in 1999; they wanted a database but had no capacity to create a database. Data was recorded on paper spreadsheets.
- County got funding to create CCWR database in 2000. Initial database incorporated SK data and all other data that was available. This included spreadsheets from the late 80s and 90s.
- CCWR Database has a 2-Part Structure; "Data" (contains actual data tables) & "Users" (contains forms, reports and supporting components.
- When the database is opened it defaults to the "User" format which links to data. Most tinkering is with "User" component. User sometimes crashes but data remains rock solid.
- Two additional parts of CCWR database: (1) CCWR_Sites – GIS shapefile that links to sites and (2) CCWR_DATACCWR_Households contains contact info on every person who has gathered data; kept separate for privacy.

Data sets in CCWR:

- SK began to take on special projects, such as CCD irrigation water quality projects
- Data were similar to earlier data entries
- Some parameters were added to the database over time because it wasn't originally set up to record things like flow measurements in conjunction with FC grab samples.
- Database crashed in 2008
- In 2008 SK began to work on EPA stormwater project which had numerous new items (parameters or analyticals) they were sampling for that weren't originally included in the construction of the database
- Most of the database is about the data and not the actual data itself
- EST – estimate; used if 100% of procedures were not adhered to during data collection or analysis
- Lookup tables match DOE's lookup tables so databases are speaking same language
- Uploading is much simpler
- CCWR database is more simplified than DOE
- QA is built into database by linking tables that have QA data for each instrument used to take the measurements. Will show a difference between the reference value and the actual value

Summary of CCWR database features:

- Vertical structure
- Compatible with State database
- Includes all metadata
- Nested structure reduces redundant data entry
- QC transparency

SK is working now on developing a web-based "Use" Interface

- 100+ SK volunteers could record data using a smart phone or tablet in the field.
- A few IT volunteers are working on building online datasheets/forms for recording data
- Data entry allowed into any electronic device; upload via web loader
- Firewall issues will currently not allow the CCWR database to be available on the web; working on resolving this problem.
- Long term goal is to be able to upload electronic forms to smart phones or whatever electrical device and enter data that will be uploaded to the web database.

Questions/Answers regarding CCWR:

Q - How difficult is it to learn how to use the database?

A - Getting better, new volunteer can do data entry after a few months; won't call it easy but new forms seem to be simpler.

Q - How long does it take for data to be entered into the database?

A - Field collected data can be entered the next morning. Lab data will be uploaded next day; hand-entered. Data can be entered next morning after receiving it from the lab.

Q - How does reporting data work?

A- A report for the PIC project could simply be a list of FC for a set time period and geographic location. Reports are easy to generate. The database does not currently create graphs, just creates tables with all values (does not calculate mean or median)

Q - Can data be exported to Excel?

A - Yes, but easiest to just generate a report and share with those interested (however, reports do not include any analysis, such as mean or median values)

The meeting then moved to a different location to view the actual CCWR database:

- 4 Tabs across the User view
- Button for project info; 52 current projects
- Projects tab includes all the details about the grant project; uses State's structure; includes grant name/number and general project info.

- Site Information – contains all the data for each monitoring site. All fields are same as DOE's site info form. Includes things like parking and directions.
- Tab that includes information about the Owner, permission, contact instructions, etc.

For data entry – uses Episode Form

Tour – example; 1 tour would be water quality and the other tour would be team collecting flow data; another tour is the Q-check tour

Analytics Tab – takes you to data regarding lab results

Batch – deployment of an instrument or container

Data Reports –

Concerns with access to the data in the database, also ability to export into Excel and analyze data and create graphs

Group requested that Jennifer contact Leslie Banigan at Kitsap to see how they manage data. Does all PIC targeted monitoring go into a database? How much background and info is collected with each grab sample?

PIC planning group considering using the CCWR database for Trend Monitoring; not sure about PIC project specific monitoring.

Andy Brastad suggested that we get a commitment from the county if we plan on relying on the CCWR database for long-term use of the Trends Monitoring Program. This could/would be a commitment from the County Commissioners. County has a history of "floating" things from one department to another when they haven't had a clear plan for funding/managing an issue.

Hansi Hals asked if the EIM (DOE's database) is a better place for inputting Trend monitoring data? Do we need the detail that is included in the County's database?

Joe Holtrop & Andy Brastad mentioned that the next funding for PIC implementation is coming up; 2 EPA funding rounds of funding left. This round will be highly competitive. Name should be on a list so if not funded this round then possibly funding for the next round.