

MINUTES OF

College of the Redwoods

Water and Wastewater Operations Program Advisory Meeting

633 3rd Street, Eureka – Winzler and Kelly conference room

4pm, March 25th 2011

1. Group Introductions

Attending:

- Michael Fritschi, Consultant - Winzler & Kelly
- Barry Van Sickle, Operations Manager – Humboldt Bay Municipal Water District
- Dan Duncan, Water Supervisor - City of Eureka Water
- Steve Brown, Drafting & Engineering Technology Faculty - College of the Redwoods
- Bill Bitner, Engineering Technician – Humboldt Community Services District
- Hank Bernard, Facility Manager – City of Fortuna
- Steve Paine (via phone), General Manager – Willow Creek Community Services District
- Michael Hanson (via phone), Laboratory Supervisor – City of Eureka
- Brett Vivyan, Engineering Intern - Winzler & Kelly

2. Brief Presentation of the existing Water and Wastewater Program by Michael Fritschi

The water and wastewater classes began in the fall of 2009 and have grown to a total of 7 classes.

a. Target Students

- i. Returning students – New Career Paths
- ii. New students coming into the classes directly from high school
- iii. Industry Professionals looking to improve skill sets

b. Course Content

Brief overview of course outcomes and material that is being provided to students.

c. Course Staffing

Courses are currently being taught by (3) Associate Faculty. Lack of additional Associate Faculty provides difficulty to offer all of the courses that the students need to take. This semester, two enrolled courses could not be offered due to no qualified faculty available. Discussed the need for permanent faculty, due to the relative difficulty obtaining qualified experts in the field that meet the minimum educational qualifications to teach.

d. Existing Local Certificates

Presented the local (minor) certificates available to students.

- e. Paths to Water/Wastewater Certification
 - i. CEU's for water treatment – Certificates of Achievement issued by the college (for successful completion of WAT-10 and WAT-180) will count towards the ceu's required by the California Department of Public Health to qualify students to take the Grade II water treatment and the Grade II water distribution examination.
 - ii. Educational Points for Wastewater Certification Exams – WAT-10 and WAT-180 will also count for sufficient educational points to qualify to take the Grade II wastewater treatment examination given by the State Water Resources Control Board

- 3. Overview of future plans of the Water and Wastewater Operations Program, Michael Fritschi and Steve Brown
 - a. AS Degree and full Certificate Program in Water Systems Technology
 - b. New WAT courses proposed
 - i. Applied Fluid Mechanics for the Municipal Industry

 - ii. Mechanical & Electrical Systems in the Water and Wastewater Industry
 - c. Internship Program

- 4. Public Comment
 - a. How is the local industry being served?
 - i. How can we (College of the Redwoods) improve? What are the needs from the industry? Course/Program Content

Discussion for proposed course: WAT -25 Mechanical & Electrical Systems in the Water and Wastewater Industry.

Hank: Concern with programming in Wat-20 latter logic? Don't want to misinform.

Response: To familiarize not specify and qualify. Don't intend to attempt teach programming (PLC)" just familiarize students with "how" SCADA works. Simple mechanical and electrical maintenance with a "hands on"laboratory

Barry: Need protections on SCADA. Possibly bring in people and write programs.

Bill: One 4-unit class for SCADA suggested. Don't want to fry board (damage equipment)

Barry: The more tools the better - Photo indexing to programming - Off-line set-up

Hank: Who's the target audience? What level of student?

Response: Potentially student cohorts in their 4th semester or industry incumbents.

Bill: Maintenance workers have knowledge of SCADA must know what they're looking for/at,
Good Skill = yes, but not an entry-level skill

Steve: Perhaps prescribe electronics course to lead into, need instructors, or separate series of electronics classes (SCADA)

ii. Skill sets

Hank: Theory vs. Application. Need to have students with more hands-on experience

Mike: Program is intended to provide well educated students in the field that can function with minimal training that can gain experience and promote to management quicker. Role of municipal agencies to provide the majority of the student's "hands on" or "on the job experience" the college can only provide so much of that experience. It is envisioned that the role of the local municipalities as a partner with the college to provide that experience.

iii. Other Needs of the Program

Hank: More "hands on" maintenance and operations courses to compliment theory.

Bill: Map/schematic/plans/drafting skills

Hank: Missing a regulatory/legal class

Dan: Some Basin Plan information, NPDES, Wastewater Collections system class: Know when to call regulators for an accidental release, Small regulatory aspects or "Operations Compliance", Limits

Barry: Surface and GW topics are covered in WAT 30 and WAT 31

Dan: Could implement some of the other regulatory issues in other classes. CalARP issues?

Mike: Perhaps a 1-unit Regulations Class for excess information that doesn't fit in other classes like Risk Management Plans or learn these on the job?

Bill: Mapping, need technicians that can find manholes on a map, to be able to read blue prints: Sewer, Hydraulic. Hands-on maintenance.

Barry: What type of real estate is needed for Hands-on class?

Steve: Auto Shop, Diesel Lab, Fenced Yards

Mike: What do we do about instructors?

Barry: Can get guest lecturers: Programming, Electronics

iv. Improve linkages with College of the Redwoods?

Hank: City Hall has issues with internships – training interns that would then leave

Mike: Go to City Council meetings to present program?

Bill: Contact HCSD – Maintenance Dept. with Tim Laython (would be best placement)

Barry: Entry-level exposure. If intern isn't licensed, what can they do at a higher classed facility? Would be easier if students had Grade 2 license. Need a Grade 3 to operate our particular facility. Current have an Internship program with Humboldt State, they provide "handpicked" students and a "packet" of information (insurance, liability, contact, etc.)

Barry: Could "sell" the program if get municipality representatives together. Need benchmarks & criteria and information organized and "pre-packaged"

Mike: It has to be easy for employers. We will look into presenting to City/District managers a "packaged" internship program

b. Survey

Mike: Survey to be sent to attendees and other managers of local agencies.