

STUDENT INTERN PROJECT PROPOSAL

Service: DWPS

Submitted by: Tanya Fogg

Project title: Sampling

Overall description and purpose of project, and its value to EHD and/or the public:

Collect water samples for bacteriological, nitrate, and arsenic quality.

This will provide assistance in a vital DWPS program. It will help to ensure public health is protected in drinking water supplies. As the Dept is presently short-manned, it is particularly important in helping to meet the needs of the small water sampling program. The intern will learn proper sampling techniques, gain a thorough knowledge of common contaminating constituents found in drinking water, and develop communication skills vital for all occupations.

Description(s) of proposed intern task(s):

Collect water sample, follow-up with results, type report:

Drive in county vehicle to water system for collection of water sample from an outside tap, contact water system via phone to follow up with any positive results, type report to be mailed to water system.

Estimate of person-hours required for each task:

Average time spent in the field is 4- 6 hours collecting an average of 10 (+) samples

Average time for follow-up results (phone calls) is 30 min – 1 hr

Average time for typing reports is 3 hours

Description of intern skills or anticipated training required for each task:

Proper sampling technique (typically watch specialist 1st day, collect with specialist 2nd day)

Follow up results will require understanding the basics of bacti, nitrate and arsenic

contamination (where it comes from, how it is harmful,etc.) Difficult calls are referred to staff.

Type reports will require an understanding of how to use the existing templates.

Description(s) of proposed intern deliverable(s):

Provide water sample results for small water systems. Assist in protecting public health and maintaining compliance with the small water system program.

Estimate of person-hours required for each deliverable:

Same as above

Note: With the exception of typing reports, training is not a great burden as it can be accomplished while the specialist is accomplishing their normal sampling duties. (They can simply teach how to sample when collecting their required samples and can explain the constituents while sampling.)

Description of intern skills or anticipated training required for each deliverable:

Same as above

Estimate of direct costs to EHD (materials, transportation, training, etc.):

County vehicle required for sampling. Some time is required initially for training but no apparent cost associated with proposal.

STUDENT INTERN PROJECT PROPOSAL

Service: Hazardous Materials Management Services

Submitted by: Bruce Welden

Project title: Pesticide Incident Database

Overall description and purpose of project, and its value to EHD and/or the public:

Project will involve the review of 20 years of pesticide incident data (from paper and electronic files) and assigning GPS coordinates to locations of pesticide incidents by field visits or using the County GIS system. The data will then be transferred into an electronic database to allow for tracking of incidents and searching of the data to see trends in locations or types of incidents. Will allow for better reporting to the Board of Supervisors, Agricultural Commissioner and the public and will enhance response capabilities and assist in planning for future incidents based on past events.

Description(s) of proposed intern task(s):

1. Review paper and electronic files
2. Collect GPS data from field visits or using County GIS system
3. Enter data into electronic database
4. Print Reports

Estimate of person-hours required for each task:

1. 40
2. 80
3. 40
4. 24

Description of intern skills or anticipated training required for each task:

1. Ability to use electronic spreadsheets and word processing software
2. Ability to use field GPS units to collect data
3. Ability to use electronic spreadsheets and word processing software
4. Ability to use electronic spreadsheets and word processing software

Description(s) of proposed intern deliverable(s):

1. Electronic database of emergency response data
2. Summary reports of emergency response incidents

Estimate of person-hours required for each deliverable:

1. 160
2. 24

Description of intern skills or anticipated training required for each deliverable:

1. Ability to use electronic spreadsheets and word processing software and ability to use field GPS units to collect data
2. Ability to use electronic spreadsheets and word processing software

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Estimate of direct costs to EHD (materials, transportation, training, etc.):

1. Materials - \$100.00
2. Transportation - \$1000.00
3. Training (4 hours staff time)- \$ 500.00
4. Supervision (12 hours staff time) - \$ 1500.00

Total Costs approximately \$ 3100.00

STUDENT INTERN PROJECT PROPOSAL

Service: Hazardous Materials Management Services

Submitted by: Bruce Welden

Project title: Emergency Response Database

Overall description and purpose of project, and its value to EHD and/or the public:

Project will involve the review of 20 years of emergency response data (from paper and electronic files) and assigning GPS coordinates to locations of emergency response incidents by field visits or using the County GIS system. The data will then be transferred into an electronic database to allow for tracking of incidents and searching of the data to see trends in locations or types of incidents. Will allow for better reporting to the Board of Supervisors and the public and will enhance response capabilities and assist in planning for future incidents based on past events.

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STUDENT INTERN PROJECT PROPOSAL

Service: Solid Waste and Recycling Services Submitted by: Matt Fore

Project title: GIS Input and Mapping of Illegal Dumping Incidents

Overall description and purpose of project, and its value to EHD and/or the public:

The overall goal of this project is to build a Geographic Information Systems Layer (GIS) layer of all incidents of illegal dumping and illegal accumulation of solid waste for the past several years. This information will be used to construct maps for distribution to enforcement agencies to help focus surveillance to improve prevention and enforcement efforts.

To accomplish this goal, the intern would perform the following:

- Review all complaints and referrals in Environmental Health records
- Contact other public agencies including the County Sheriff and Public Works Departments to solicit additional locations.
- Travel to each location to record specific Global Positioning System (GPS) coordinates
- Construct a GIS layer of all incidents by year.
- Overlay the layer(s) on base maps

Description(s) of proposed intern task(s):

See description above.

Estimate of person-hours required for each task:

- Review of Environmental Health Division Records: 20 hours
- Research with other Agencies: varies depending upon initial findings,
- Recording GPS Coordinates: 40 hours
- Construct GIS Layer: varies depending upon baseline knowledge

Description of intern skills or anticipated training required for each task:

Navigation of "Envision" Database

Basic use of hand-held GPS unit

Description(s) of proposed intern deliverable(s):

- GPS coordinates for all illegal dumping/illegal solid waste accumulation incidents for past ten years.
- GIS layer of data set (depending upon intern knowledge and proficiency in GIS)

Estimate of direct costs to EHD (materials, transportation, training, etc.):

- **Orientation of intern in Environmental Health Programs and Illegal Dumping Prevention Program: 20 hours**
- **Basic training in GPS data gathering would take approximately 20 hours of training by Senior Environmental Health Specialist**
- **GIS Layer and Mapping Training: If intern has no experience, training by Environmental Health staff could be extensive and prohibitive. However, if**

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intern has prior GIS experience, training by Environmental Health staff could be nominal (20 hours).