

FORMAT FOR GROUNDWATER PROJECT PROPOSALS

1.0 PROJECT PROPOSAL SUMMARY SHEET

A Project Proposal Summary page will precede each proposal.

2.0 STATEMENT OF NEED

2.1 Provide the water quality priority as identified in the most recent 305(b) report, source water assessment, and/or NPS Management Plan. To be considered for funding, groundwater and pesticide projects must be identified as priorities in the State NPS Management Plan. The State NPS Management Plan, in turn, must reference the State Comprehensive Groundwater Management Plan and the Pesticides in Groundwater State Management Plan when they are finalized.

Groundwater demonstration projects (e.g., wellhead protection, abandoned well sealing) need to be submitted as Information and Education Projects.

2.2 Describe the aquifer, and describe the relationship of the aquifer to surface waters in the region. Provide general information on the aquifer region being studied, such as land ownership, land use, soils and pertinent regional geology. Describe the aquifer designated use classification, and discuss to what extent the designated uses of the water resource are being met.

Provide information regarding the water resource that will further aid in understanding the project. Examples are: document the use of the groundwater system being studied as a drinking water supply, discuss the impact of groundwater quality on the consumers or speculate on the consequences if the situation or problem is not addressed.

2.3 Provide maps showing the location and size of the aquifer, including approximate land uses, land ownership and location of the project and important water resources. Include information on the locations of present, past and future groundwater sampling locations, natural springs, possible sources of problems, point sources, and any unique situations that may be important to the project.

2.4 Describe the existing or potential water quality problem(s), listing, as available, the contaminants, historic concentrations ranges (acute/chronic levels) and areal extent of the contamination. Supply information pertinent to the sources, pathways, and timing of the pollution problem. Include any supplemental information that may be relevant to the water quality problem.

For example, for agricultural projects list crop types, irrigation systems, fertilizers and pesticides used, application rates and application schedule.

For urban projects document the type of urban development, acreage of various land uses such as parks, housing, and industrial areas.

For mining projects include the volume, chemistry and location of tailings and mine discharges as well as the groundwater/surface water interactions/relationships.

Include a discussion that describes currently available information, the data sources, and an evaluation/assessment of the accuracy, precision and value of the existing data base.

3.0 PROJECT DESCRIPTION

3.1 Describe the goals(s) for the project. Goals are broad statements linked to the project need and are achievable through measurable objectives. Goals may describe, for example, improved understanding of groundwater recharge zones or improved procedures for delineating wellhead or source water protection areas. In addition, goals may include the development of new tools specifying the benefits to be derived in terms of water quality. For information and education activities in groundwater projects, goals may involve changes in public attitudes or awareness of NPS problems as they relate to groundwater quality and/or solutions.

3.2 List and provide a narrative description of each objective and task. Objectives specify in more detail what is to be accomplished to help meet the goal. Each objective should have at least one associated task to be performed to accomplish the objective. Tasks are specific activities that include milestones, outputs, responsible parties, and costs. The cost presented in the narrative section needs to be the total cost for implementation which includes §319 funds plus monies from additional sources.

Following is an example of a format to present goals, objectives and tasks.

Goal: Assess the presence of nitrogen and pesticides in three priority shallow aquifers to provide information for the Pesticides in Groundwater State Management Plan.

Objective 1: Monitor groundwater in the Platte, Sioux and Bear aquifers.

Task 1: The Department of Natural Resources will contract with State University to establish the monitoring network. The contract will be issued within two months from the beginning date of the grant.

<i>Products</i>	<i>- Final contract</i>
<i>Cost</i>	<i>- \$2,000</i>

Task 2: The contractor will identify 30 monitoring locations and acquire access agreements. Sites will be identified within 6 months of the contract, and the access agreements finalized within 8 months.

Products - *Areal photo base map identifying the monitoring well locations.*
 - *30 access agreements*
Cost - *\$5,000*

Task 3: The contractor will install nested monitoring wells. Wells will be installed within the first year.

Product - *30 completed monitoring wells*
Cost - *\$25,000*

Task 4: The contractor will monitor the 30 well sites twice a month for 6 months.

Product - *Data analysis and report.*
Cost - *\$30,000*

Objective 2: Develop a long range plan to establish a permanent state wide monitoring network for the purposes of monitoring contaminants in Groundwater. This activity will take 16 months to complete.

Include applicable tasks in same format as shown for Objective 1. Number tasks in a continuous sequence. For example, under the previous Objective 1, there were four tasks identified. The next task identified under Objective 2 should be listed starting with Task 5 and followed sequentially. Following this format is necessary, as it will assist the State agency in entering project information into the Grants Tracking System (GRTS).

3.3 Using a format similar to the attached milestone table, provide a project schedule that shows each task, output, quantities and timing of each output, agency(ies) responsible for each task and estimated project duration and milestone listed sequentially for each objective. Interim milestones need to be sufficiently frequent so that problems can be identified and corrected. Show milestones for mid-year, annual, and final project reports, major information and education activities, monitoring, and follow-up operation and maintenance activities if they fall within the specified project period. Estimated costs for each task should be correlated with the project budget table, Section 6.0.

3.4 Briefly explain why the lead project sponsor is the appropriate entity to coordinate and/or carry out the project.

3.5 Describe the plans and roles/responsibilities for assuring proper operation and maintenance (O&M) of any §319-funded BMPs utilized for a ground water project. This is to include frequency of on-site O&M evaluations during the life of the BMP, entity to do the evaluations, frequency of on-site O&M reviews with project sponsors by the state/tribe, follow-up procedures with the landowner/user in case there are O&M problems (and the state/tribal role), and actions to be taken if a landowner abandons a

§319 funded BMP before the end of the BMP's lifespan. All or part of the above can be covered by written state/tribal procedures, referenced in the proposal.

4.0 COORDINATION PLAN

4.1 Identify the lead project sponsor and each cooperating organization. Discuss the responsibilities, roles and commitments assumed by the cooperators and/or contractors in the project planning and implementation. Also state the mode of agreement by which cooperating organizations will interact (e.g., MOU, MOA, contract or informal agreement).

4.2 Describe local support for the project. Some examples of local support are: requests from the local landowners, conservation district, or county for the project; results from town meetings; or favorable reactions to the description of the proposed project in a local newspaper.

The EPA encourages letters of commitment of resources. The State should certify that all the appropriate letters of commitment have been received rather than attaching the letters to the proposal.

EPA is concerned that use of 319(h) funds be well coordinated with other pertinent programs. Local project sponsors should obtain from their State NPS coordinator the information needed to address coordination and linkages.

4.3 Describe how the project will coordinate with pertinent, 319 and non-319 funded NPS education programs, watershed projects, demonstration sites, and training programs being conducted by other organizations. Other programs and agencies that may have comparable responsibilities and linkages are USGS monitoring, other groundwater programs, drinking water programs, projects conducted by water conservancy districts, regional council of governments, water quality and cost share programs assisted by the NRCS, resource restoration projects assisted by the Forest Service and the Bureau of Land Management, and educational activities conducted by the Cooperative Extension Service.

4.4 Describe similar activities that are being undertaken in the study region. Provide a description of how the proposed project complements the existing project and does not unnecessarily duplicate other 319 project activities.

This consideration differs from the coordination issue presented in section 4.3. If 319 funds are being proposed to support activities that are normally the responsibility of other organizations and/or funding sources, provide an explanation justifying the use of NPS funds. EPA is concerned that Section 319 funding not be used to replicate efforts or assume other agencies' responsibilities for activities being carried out in the project area.

Examples of other agencies and programs that may be conducting similar activities or producing similar materials are: Information and Education efforts funded by the EPA

Pollution Prevention and Environmental Education Programs; projects funded by Clean Water Act 104(b)(3); Cooperative Extension Service; state water research centers; universities; state natural resources or wildlife agencies; and state funded groundwater programs.

5.0 EVALUATION AND MONITORING PLAN

5.1 It is a priority to the States, Tribes and EPA that data collected under the 319 program be useable and of high quality. Region 8 states and some tribes have EPA-approved Quality Assurance Project Plans (QAPPs) for the nonpoint source program (or separate QAPPs for ground water monitoring and surface water monitoring). Quality Assurance Project Plans contain the 16 elements required by the EPA Region 8 Quality Assurance Program.

All projects using section 319 funds to collect "environmental data" are required to have a project-specific sampling and analysis plan (SAP). Sampling and Analysis plans must address the 16 elements required of the QAPP, and are approved by the State and EPA. Contact the State or Tribe for specific guidelines on preparing SAPs.

Project sponsors may either reference the State QAPP for the standard operating procedures (SOPs) for each type of monitoring to be performed (e.g., photo points, water sample collection, fish shocking, etc.), or attach them to the SAP. Identify any site-specific amendments required for this project that are not covered by the QAPP. A plan/schedule to develop the appropriate procedures must be identified in the proposal. States and Tribes will approve project-specific SOPs.

The project sponsor has the option of providing the SAP (and SOPs referenced) in this section of the project proposal, or including the development of the SAP and SOPs as project tasks with specific milestone dates. The SAP should reference any applicable information from the project proposal and the State's programmatic QAPP, where applicable, to avoid redundant information.

5.2 Describe the monitoring strategy for the watershed, including goals, objectives, and tasks proposed to evaluate whether the project goals and objectives have been met. Describe sampling and analysis design and specify parameters to be measured e.g., up-stream/down-stream, paired watersheds, site trend, existing groundwater wells, up-gradient/down-gradient wells, geomorphology and/or riparian measurements, random, systematic, stratified random (e.g., by season or discharge).

Locate on a map sampling sites in relationship to BMP applications and priority treatment areas.

5.3 Describe how and when data will be stored, managed and reported. All data collected using §319 funding must be entered into the EPA STORET database (Memorandum of Agreement for Storing Water Quality Data in Storet, October 20, 1998). While the State is responsible for assuring that the data is entered into the

database, the project sponsor may do this if they have the capability. The sponsor should contact their State NPS coordinator to find out how to gain access to this database. This requirement should be addressed in this section.

Results from the data analysis should be used to evaluate progress, determine if changes in project/monitoring design need to be considered and assess the overall final project success. Identify organization(s) responsible for project evaluation and specify how the resulting information from the data analysis will be shared and utilized for future projects.

5.4 Describe any models used, if applicable.

5.5 Describe the long-term funding plans for the operation and maintenance (O&M) of restoration activities.

6.0 BUDGET

6.1 Present the project budget in a format similar to the attached budget summary (Attachment 3), indicating the amount and source of all federal and non-federal funds that will be used during each year of the project. The budget table is to include personnel support, BMP and other expenses that are expected to be paid with Section 319 and State and local match sources. Cost by task is not required.

The federal fiscal year (October 1-September 30) should be used to discuss and display budget information.