



MARIN MUNICIPAL WATER DISTRICT

Senior Ecologist

DEFINITION

The Senior Ecologist position leads watershed programs relating to vegetation management, volunteer program coordination, and/or environmental compliance. With an emphasis on program management and scientific skills, the position supports the watershed and natural resources programs. The incumbent leads watershed project and programs in the areas of: vegetation management, wildlife monitoring, volunteer and environmental education, and/or environmental compliance; and performs other related work as required.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level classification as distinguished from the Ecologist by its lead responsibilities in the planning, development, implementation and administration of multiple projects and data. Incumbents in the Senior Ecologist classification are further distinguished by assignments to the vegetation management and monitoring program, environmental compliance and wildlife management program and/or volunteer and environmental education program of the Watershed Department. The incumbent is responsible for a broad range of complex work involved in management of natural and scenic resources of watershed lands.

Incumbents may be expected to train, orient, and guide new and regular employees and/or seasonal employees in all aspects of their job.

EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Plans, develops, implements and administers the District's watershed and natural resources programs and projects;
- Maintains and oversees maintenance of a variety of records, sensitive biological monitoring data, project budgets and statistical reports;
- Identifies key natural resources and designs inventory and monitoring programs for these resources and/or volunteer program initiatives;
- Designs and conducts applied research studies related to wildlife programs, vegetation management, environmental compliance, roads and trails, natural resources, and environmental education and volunteer programs;
- Prepares or manages preparation of scope of work for contracts, solicits proposals, recommends selection, and reviews the work of environmental consultants preparing environmental documents, permits and special studies for District projects;
- Prepares staff reports for presentation to the Board of Directors, and delivers oral presentations and annual reports before the District Board, committees and

- community based organization and the public;
- Establishes and maintains partnerships with community groups and businesses aimed to increase public participation in the on-going stewardship of the Mt. Tamalpais, Nicasio, and Soulajule Watersheds;
- Coordinates and/or contributes to the watershed Geographic Information System including documentation, data review, database design, and coordination with the California Natural Diversity Database (CNDDDB) and Calflora;
- Works with program staff, and leads as appropriate, to create a high performance, service-oriented work environment that supports the District's mission, organizational goals and service expectations;
- Oversees the coordination and planning of work crews in the field; determines work assignments, scheduling, site selection, site evaluation, and crew make-up; monitors field staff by direct observation; summarizes field work progress and proposes modifications to methods or scheduling of staff as needed to supervisors and managers; reports performance of field staff to managers;
- Presents District programs to stakeholder groups, and collaborates with technical working groups, and facilitates research and community engagement activities on watershed lands;
- May assume a temporary acting assignment for supervising departmental staff;
- Ensures that safe working conditions are maintained;
- Develops natural resource management plans, habitat restoration plans, monitoring programs and reports, education and stewardship initiatives, and environmental documentation; and
- Performs related duties and responsibilities as required.

In addition to the duties listed above, incumbents assigned to this classification may perform the additional duties listed below, respective to their assigned area of focus. The District may also assign incumbents to multiple areas listed below, based on business need:

Vegetation Ecologist

- Coordinates and tracks vegetation management activities in SAP, ArcGIS, Calflora and other database systems;
- Oversees biological monitoring for construction, maintenance of road and trails, fuel reduction zones, re-vegetation, habitat restoration, stream restoration, invasive species management projects and other watershed projects as needed;
- Develops and recommends mitigation measures to be followed that will eliminate or minimize the environmental effects of projects; monitors construction projects to ensure the implementation of mitigation measures and legal compliance; resolves problems that may occur during construction; monitors ongoing operations and maintenance of such projects to minimize impacts to the environment;
- Develops natural resources inventory and monitoring programs for sensitive biological and natural resources;
- Performs botanical and wetland surveys for pipelines, tanks, and other District facility construction projects and recommends mitigation measures to protect natural resources; develops technical reports to support watershed management operations;
- Analyzes the effects of vegetation manipulation, climate change, forest pathogens, and fire suppression on plant species composition and vegetation structure and function;
- Participates in wildfire working groups; conducts forestry assessments, analyzes fuel loads on watershed lands and prioritizes annual vegetation management projects;
- Develops annual vegetation management workplans, reports, and compliance and

mitigation reports per CEQA guidelines; and

- Coordinates, trains and directs field crews in the establishment of vegetation management monitoring plots and invasive management; oversees contractors work relating to vegetation management activities.

Volunteer Coordinator

- Directs, plans, implements and administers programs and activities to carry out the functions of the Watershed volunteer programs to support the goals and objectives of the Watershed natural resource management programs and other District programs and services as needed;
- Coordinates and tracks volunteer program activities in SAP, creates volunteer Work Orders, tracks volunteer program outcomes using ArcGIS and/or other databases, and develops annual volunteer reports; contributes volunteer program data to annual vegetation management reports;
- Prepares and inputs two-year budget requests, manages volunteer program budget, and develops annual volunteer work plans;
- Oversees the development and implementation of environmental education activities, in collaboration with staff from Resource Management, Facilities and Maintenance, Protection/Enforcement, and Water Conservation, and promotes restoration, conservation and sustainable environmental practices;
- Carries out complex natural resource studies and develops citizen science programs to support natural resources inventories, monitoring programs and vegetation management activities;
- Directs and oversees the development, implementation, and updating of the District volunteer program and environmental education initiatives to align with updated watershed plans, programs and projects as needed;
- Develops grant proposals to support environmental education programs and watershed resource management projects;
- Supervises, selects, trains, leads and evaluates the work of volunteers, seasonal help, and interns and applies effective training principles and practices;
- Initiates, compiles and completes complex contracts, miscellaneous agreements, and research permits in support of natural resource management programs; and
- Develops watershed and volunteer program outreach strategies, coordinates watershed content for the District's website, produces newsletter and other communications materials to support Watershed programs and projects; plans and implements volunteer recognition activities.

Environmental Compliance

- Coordinates the preparation of resource management plans and permit documents, and reports for governmental agencies; prepares grant applications and conducts project reporting to comply with long-term monitoring requirements;
- Leads watershed environmental planning and land management activities; maintains strong working relationships with resource agencies;
- Oversees consultants and field crews conducting wildlife surveys, natural resource monitoring, and develops monitoring plans and annual reports;
- Conducts and coordinates project specific resource assessments to inform regulatory review, CEQA and watershed management programs;
- Initiates, compiles and completes complex contracts, miscellaneous agreements;
- Manages project-specific permit applications, and grant proposals; conducts post project monitoring to inform grant reports, resource agency permits, and watershed operations;

- Directs wildlife monitoring programs, develops wildlife protection measures for projects, manages sensitive natural resources data, and reviews biological studies to inform watershed operations;
- Oversees watershed GIS data, data collection activities, and field equipment; carries out complex GIS data analysis;
- Oversees project-level environmental compliance in accordance with adopted plans and CEQA documents; assists with land use and research permit reviews, and reviews PG&E access requests, agreements, and environmental practices;
- Responsible for project specific mitigation monitoring and reporting programs;
- Inspects project construction and implementation to insure mitigation compliance; and
- Coordinates, trains and directs field crews in the biological monitoring and recommends project specific mitigation measures.

QUALIFICATIONS FOR EMPLOYMENT

Knowledge of:

- Principles, practices, and methods of fishery and wildlife management, botany, arboriculture, forestry ecology, environmental science, planning, and/or natural resources; techniques and methods in making biological investigations of watershed natural resources; materials, equipment and techniques used in biological monitoring;
- Federal, state and local legislation, regulations, rules and ordinances pertaining to environmental laws, codes established for fire prevention and suppression, wildland recreation, vehicle operation, public property violations, fish and wildlife violations, such as CEQA, the Endangered Species Act, the Clean Air Act, etc;
- Principles and practices of contract administration, purchasing and procurement and budget administration;
- Natural and biological resource conservation principles and practices for terrestrial and aquatic habitat protection and enhancement, and integrated pest management;
- Wildland fire ecology, science and behavior, and fuel reduction methods;
- Practices and techniques used for recruiting, training, and retaining community volunteers and stakeholder engagement;
- Principles and practices of employee management and supervision, including selection, training, evaluation, coaching and performance management;
- Personal computer user applications, particularly as related to compiling spreadsheets, report writing, scheduling, and, SAP and other database systems;
- Geographic Information System (GIS) for monitoring and managing natural resources;
- Environmental restoration practices and methods; mitigation design and monitoring; stream restoration construction best management practices;
- Principles, practices and methods related to erosion control especially to best management practices for streams and wildland roads and trails;
- Safe construction practices and procedures including safety precautions for operating power equipment; and
- Construction drawings, maps, specifications, permits, and monitoring requirements relevant to watershed resource programs.

Ability to:

- Organize, direct and manage work priorities and coordinate personnel, contracts, materials and equipment to complete projects and implement programs;
- Analyze work problems, reports, project documents, technical data and materials, and reach sound conclusions and recommendations; prepares detailed work plans and staff assignments to guide the work of such reports and analyses;

- Coordinate field personnel, provide technical biological monitoring training; oversee construction best management practices; apply interest-based problem solving methods;
- Establish and maintain effective working relationships with those contacted in the course of work;
- Monitor work orders, project costs, and inventory controls; maintain accurate records, write clear and effective reports, and prepare related statistical documents;
- Conduct budget analysis, work planning, and scheduling and program reviews;
- Develop staff reports and presentations for the Board of Directors;
- Identify sensitive biological resources, inventory and document populations of flora and fauna; develop monitoring methods and assign work to field staff;
- Support District teams and/or consultant staff in the preparation of complex environmental documents such as Environmental Impact Reports and Statements, and Biological Assessments;
- Ability to drive and operate a 4WD vehicle in off-road conditions;
- Travel to off-site work locations depending upon job assignment;
- Work weekends and/or evenings to make presentations or attend meetings, and to travel to alternative work locations for these and other purposes; and
- Operate computer applications utilizing word processing, project management and spreadsheet software.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

- Completion of a Bachelor's degree from an accredited college or university with major course work in biology, natural resources management, environmental science/studies, forestry, wildlife management, environmental planning, hydrology, environmental education, ecology or a related field; and
- Five years of increasingly responsible experience in botany, forestry, environmental compliance, biological monitoring, wildlife management, volunteer coordination and community engagement, and/or implementation of natural resources management programs.

OR

- Completion of a Master's degree from an accredited college or university with major course work in biology, natural resources management, environmental science/studies, forestry, wildlife management, environmental planning, hydrology, environmental education, ecology or a related field; and
- Three years of increasingly responsible experience in in botany, forestry, environmental compliance, biological monitoring, wildlife management, volunteer coordination and community engagement, and/or implementation of natural resources management programs.

OTHER REQUIREMENTS

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such

disaster service activities as may be assigned to them by their superiors or by law.” (Ref: California Government Code, Title 1, Division 4, Chapter 8, Sections 3100-3109);

- Possession of an appropriate California driver's license issued by the State Department of Motor Vehicles and satisfactory driving record;
- First Aid and CPR certificates to be obtained within the first six months in the positio;
- Willingness to wear prescribed uniform;
- Willingness to work alternate work schedules and overtime as necessitated by changes in operating conditions; and
- GIS, GPS knowledge and map making skills are desirable.

PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will need the mobility to work in a standard office setting, operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards which is often performed while sitting for extended periods of time. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is required to lift and carry short distances objects such as reams of copier paper, office supplies, files, books, printed materials weighing up to 25 pounds and occasionally other packages or equipment weighing up to 50 pounds. This position requires that the employee demonstrate adequate hearing and speech to converse in person and over the telephone, and vision to read printed materials and use a computer screen. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

The noise level in the work environment is quiet to moderate noise. The employee is exposed to outdoor temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established: January, 2020

Approved by: Human Resources Manager