

EMPLOYEE:

CLAIM #



Job Analysis Form

ALTERNATE FORMAT AVAILABLE

JOB TITLE Ecologist **JOB CLASSIFICATION** Environmental Scientist II

DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER 199.167-022

DOT TITLE Environmental Analyst

DEPARTMENT Natural Resources and Parks

DIVISION Water and Land Resources

OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE 6

CONTACT'S NAME & TITLE Jon Hansen, Supervising Environmental Scientist

CONTACT'S PHONE 206-296-1966

ADDRESS OF WORKSITE

201 South Jackson, 6th floor
Seattle, WA 98104

VRC NAME Kyle Pletz

DATE COMPLETED 1/30/09

WORK HOURS

9:00am-5:00pm, Monday through Friday, 40 hours per week; may vary schedule within core hours.

OVERTIME (Note: Overtime requirements may change at the employer's discretion)
Required, on a rare occasion in accordance with business demand.

JOB DESCRIPTION

This position provides ecological support to senior scientists and engineers within the Capital Projects section to design, permit, construct and monitor surface water improvement and habitat restoration projects. The position performs stream and wetland surveys, collects other technical data as requested, helps prepare permit applications, and assists in design and construction of drainage and restoration projects. The position independently manages small restoration projects for the SHRP program.

The position is responsible for managing the Washington Conservation Corps Program. The WCC crews are a vital component of the CIP program. They provide environmentally sensitive construction in remote sites where equipment access is infeasible. Program management includes annual renewal of the WCC contract; hiring, training & supervising crews; year-round scheduling and assignment of crews for projects; overall program management, financial management and processing of payments, and overseeing the work of the crews and their supervisors. The job requires knowledge of construction techniques, construction equipment, and safe work practices around construction equipment and unstable field conditions. Approximately 40% of time is spent out of the office working in the field.

ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write & communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.
5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

JOB SPECIFIC REQUIREMENTS

- Basic knowledge of wetland, stream and river restoration construction techniques.
- Knowledge of construction techniques involving hand labor and small to mid-sized tools and equipment.
- Ability to hire, train and supervise multiple conservation crews. Schedule and coordinate work requests.
- Basic knowledge of stream, riverine and wetland processes.
- Basic knowledge of fluvial and landscape processes.
- Ability to perform stream surveys using various methodologies and stream-snorkeling protocols.
- Ability to assess hydrology, soils and native vegetation and delineate wetlands by applying current wetland delineation techniques.
- Ability to write wetland delineation and stream assessment technical reports suitable for distribution outside the County under the supervision of senior staff. Ability to produce graphics, charts and tables which present and illuminate data and conclusions.
- Ability to identify native plant species in all seasons.
- Ability to identify salmonids at various life stages and other fish species typically found in lowland streams, rivers and Puget Sound.
- Knowledge of native plants, their habitat requirements, utility in bioengineering projects, propagation and salvaging techniques.
- Knowledge of noxious weeds including ID, control methods, noxious weed law, integrated pest-management, and the appropriate use of herbicides in sensitive areas.
- Ability to design planting plans appropriate to soil, light and moisture conditions.
- General knowledge of construction techniques and equipment used in surface water CIP projects, including the use of heavy-equipment, cranes and helicopters.
- Knowledge of safety protocols for field work and surface water CIP construction.
- Ability to design and apply state-of-the-art restoration techniques to site-specific situations under the direction of senior staff.
- Skill in determining construction impacts, including ability to implement erosion control and best management practices.
- Ability to use field turbidity meters to assess construction impacts on water quality.
- Knowledge of site watering and irrigation systems, including water rights, water withdrawal permits, and ability to design irrigation systems.

- Skill in developing and tracking project scopes, schedules and budgets for SHRP-level projects and programs, as assigned.
- Basic knowledge of costs and effectiveness of various restoration methodologies, techniques and elements.
- Ability to give clear direction to volunteers and restoration crews.
- Skill in reading, interpreting and producing plans, specifications, drawings, technical maps and documents.
- Ability to communicate effectively in both oral and written forms.
- Ability to apply knowledge of relevant environmental and land-use regulations at the local, state and federal levels as they apply to environmentally sensitive areas.
- Ability to use Microsoft Word and Excel and standard computer programs employed at WLRD.
- Ability to work effectively in a team setting.
- Ability to manage and track multiple projects and tasks.
- Ability to work effectively with local environmental groups, other agencies and private citizens.
- Ability to work out of doors in rough terrain for extended periods of time in inclement weather.
- Must have or possess the ability to obtain a valid WA state driver's license.

ESSENTIAL FUNCTIONS

1. Manage the Washington Conservation Corps Program. Program management includes annual renewal of the WCC contract; hiring, training & supervising crews; year-round scheduling and assignment of crews for projects; overall program management, financial management and processing of payments, and overseeing the work of the crews and their supervisors. The job requires substantial knowledge of construction techniques, use of hand and mechanized tools and equipment, larger construction equipment, and safe work practices around construction equipment and unstable field conditions.
2. Work independently while managing and implementing small habitat enhancement projects (SHRP). Work with County staff from other groups and staff from other agencies and organizations to identify potential projects. Apply project management principles, such as producing and tracking scopes, schedules and budgets, for individual projects. Choose appropriate design and construction methods for projects with varied objectives such as culvert replacement, large woody debris placement, wetland and riparian vegetation enhancement, bank stabilization, and reforestation. Apply for and obtain appropriate permits and document regulatory compliance. Meet with property owners to discuss property use and access. Work with real property staff to acquire necessary easements and permissions. Acquire materials and oversee construction. Arrange for maintenance and monitoring to assure project success. Work is performed under the direction and supervision of senior program manager.
3. Assist senior ecologists and engineers in design, permitting, implementation and construction supervision of surface water capital projects. This includes initial identification of projects/opportunities, initial survey and, base map preparation including the use of survey equipment, GPS and GIS; participation in design/team meetings, construction crew supervision and monitoring.

4. Collect and analyze field data and existing natural resource information needed for implementation of the surface water CIP program, interpret data, formulate conclusions, summarize and present pertinent data and conclusions, and write and produce technical reports including graphics, charts and figures under the direction of senior staff. Classify streams and wetlands according to regulatory criteria.
5. Perform stream inventories and assessments, including evaluations of fish habitat, bank stability, channel geomorphology, substrate composition, riparian flora and fauna, aquatic macroinvertebrates, fish populations, and adjacent land uses. Interpret, measure, categorize, and otherwise describe stream characteristics as observed in the field. Select appropriate methodologies for assessing parameters under supervision of senior staff. Schedule and coordinate field visits, equipment and other staff. Write reports.
6. Under the direction of senior staff perform wetland identification/delineations, including evaluation of soils, vegetation and hydrology according to criteria developed by the U.S. Army Corps of Engineer, including current delineation procedures specific to western WA. Assess of wetland functions and values. Determine wetland boundaries. Interpret, measure, categorize, or otherwise describe wetland characteristics as observed in the field. Schedule and coordinate field visits and equipment. Write reports.
7. Under the direction of senior staff, coordinate and consult with permitting and regulatory agencies. Research and prepare SEPA checklists. Prepare JARPA's and other documents necessary for obtaining permits for surface water capital projects. Produce appropriate cover and transmittal documents for review by senior staff.
8. Assist senior staff with construction planning and preparation, construction oversight and construction monitoring. Conduct turbidity monitoring during construction. Under the direction of senior staff, implement best management practices, erosion control and other mitigating measures.
9. Remove fish from construction sites prior to construction activities. Isolate construction sites using site-built fish screens and/or coffer dams. Use seine nets, dip nets and electrofisher to capture fish. Care for captured fish, document their numbers and species, and ensure that they are relocated to suitable habitats.
10. Manage the Large Woody Debris (LWD) Program. Acquire LWD from donors or vendors to be used in surface water CIP projects. Solicit data and determine section needs, arrange for transport and delivery to project sites, arrange for storage or staging, maintain inventory and storage facility. Develop and monitor budget to ensure recovery of program costs.
11. Assist Senior Ecologists in researching, compiling and writing of Biological Assessments to comply with the Endangered Species Act. Produce figures, write appropriate sections, provide editorial input, and produce final reports. Correspond with personnel from other agencies to obtain necessary information.
12. Provide technical assistance, resources, and environmental services to resource agencies, non-profit organizations and the public.

PERSONAL PROTECTIVE EQUIPMENT USED

Steel toe boots, gloves , ear protection, eye protection, hard hat and safety vest.

OTHER TOOLS & EQUIPMENT USED

Telephone, fax machine, computer, shovel, pry bar, winches, power auger, camera, rain gear, 100-foot tape measure, County vehicle with an automatic transmission, hand auger, maps, surveying equipment, levels, compass, Munsell soil color charts, spherical densiometer, GPS equipment, drill, sawzall, rope, chain, pumps, tubing, hammer, machete, ax, sledge hammer, electrofishing equipment, nets, bailers, water level meters.

PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED

Continuously = occurs 66-100% of the time
Frequently = occurs 33-66% of the time
Occasionally = occurs 1-33% of the time
Rarely = may occur less than 1% of the time
Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

This job is classified as

Medium—exerting 20 to 50 pounds of force occasionally, and/or 10-25 pounds of force frequently, and/or up to 10 pounds of force constantly.

Standing

Health Care Provider initials if restricted _____

Occasionally on thick uneven and undeveloped vegetation and undeveloped land, steep slopes, and well as flat carpeted surfaces for up to 10-15 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs while making observing and directing construction projects, taking notes in the field, observing project areas, conversing with coworkers, and the public, taking notes in the field as well as observing project areas. Approximately 40% of time is spent out of the office working in the field.

Walking

Health Care Provider initials if restricted _____

Occasionally on thick uneven and undeveloped vegetation and undeveloped land, steep slopes, and well as flat carpeted surfaces for distances of up to 1/4 mile for up to 20 minutes at a time for up to 6 hours total in a work shift. Most commonly occurs while making field observations, observing project areas and traversing office area as well as getting to and from work sites. Approximately 40% of time is spent out of the office working in the field.

Sitting

Health Care Provider initials if restricted _____

Frequently on an office chair or automobile seat for up to 1-1.5 hours at a time for up to 5 hours total in a work shift. Most commonly occurs while performing computer duties and attending meetings as well as driving a County vehicle to and from worksites. While working in the field, may also include sitting on ground.

Climbing

Health Care Provider initials if restricted _____

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while climbing up steep slopes and over obstacles such as logs, while making construction observations and observing project areas. Approximately 40% of time is spent out of the office working in the field.

Balancing

Health Care Provider initials if restricted _____

Continuously on thick, uneven vegetation and undeveloped land, muddy terrain, logs, walking on planking, slick wood, on steep slopes, and well as flat carpeted surfaces for up to 2.5 hours at a time for up to 7.5 hours total in a work shift. Most commonly occurs while making construction observations, taking notes in the field, observing project areas, conversing with coworkers, and the public. Approximately 40% of time is spent out of the office working in the field.

Bending neck up

Health Care Provider initials if restricted _____

Occasionally for up to 1 minute at a time for up to 20 minutes total in a work shift. Most commonly occurs while looking up slopes and geologic features, picking/pulling equipment from shelving units, watching for falling limbs, observing equipment (such as helicopters) and observing weather.

Bending neck down

Health Care Provider initials if restricted _____

Frequently & Highly Repetitive for up to 1 hour at a time for up to 4 hours total in a work shift. Most commonly occurs while sampling and studying soil, cleaning boots and equipment, working with hand tools, reviewing plans, performing computer duties, reviewing documents and removing objects from a County vehicle.

Bending/Stooping

Health Care Provider initials if restricted _____

Occasionally for up to 2-3 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while sampling and studying soil, digging soil pits, walking under trees and branches on undeveloped land and removing objects from a County vehicle.

Kneeling

Health Care Provider initials if restricted _____

Occasionally on thick uneven and undeveloped vegetation surfaces for up to 10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while sampling and studying soil. Approximately 40% of time is spent out of the office working in the field. The employee can alternate with squatting in accordance with personal preference.

Squatting

Health Care Provider initials if restricted _____

Occasionally on thick uneven and undeveloped vegetation surfaces for up to 10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while sampling and studying soil. Approximately 40% of time is spent out of the office working in the field. The employee can alternate with kneeling in accordance with personal preference.

Crawling

Health Care Provider initials if restricted _____

Rarely on thick uneven and undeveloped vegetation surfaces for up to 1 minute at a time for up to 5 minutes total in a work shift. Most commonly occurs while sampling and studying soil, leaving sites using alternative routes without trails. Approximately 40% of time is spent out of the office working in the field.

Operating Controls with Feet

Health Care Provider initials if restricted _____

Frequently for up to 1 hour at a time for up to 2 hours total in a work shift while driving a County vehicle.

Reaching above shoulder height

Health Care Provider initials if restricted _____

Rarely for up to 10 seconds at a time for up to 5 minutes total in a work shift while reaching for objects on high shelves, tying flagging to mark field locations, using tools to move/remove brush and writing on a whiteboard.

Reaching at waist to shoulder height

Health Care Provider initials if restricted _____

Continuously & highly repetitive for up to 1.5 hours at a time for up to 6 hours total in a work shift, reaching for/returning objects to shelving, opening/closing file cabinets, reviewing plans, moving brush on trail, while driving, performing computer duties and manipulating documents.

Reaching at knee to waist height

Health Care Provider initials if restricted _____

Occasionally for up to 2-3 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while sampling and studying soil, digging soil pit, walking under trees and branches on undeveloped land and removing objects from a County vehicle. Approximately 40% of time is spent out of the office working in the field.

Reaching at floor to knee height

Health Care Provider initials if restricted _____

Occasionally on thick uneven and undeveloped vegetation surfaces for up to 10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while sampling and studying soil. Approximately 40% of time is spent out of the office working in the field. The employee can alternate with squatting in accordance with personal preference.

Lifting 1-10 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 30 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs with weights of 5-10 pounds while Digging loading and unloading an auger, shovel, vest or measuring tape from a County vehicle, moving water and soil samples, lifting file boxes, books, code folders, site plans, site documents and reference materials. When working in the field the employee wears a vest filled with equipment such as reference manuals, measuring equipment etc. thorough the duration of the day. Approximately 40% of time is spent out of the office working in the field.

Carrying 1-10 pounds

Health Care Provider initials if restricted _____

Frequently for distances of up to 20 minutes at a time for up to 5-6 hours total in a work shift. Most commonly occurs with weights of 10 pounds while wearing a vest or carrying a shovel or auger when walking to and from work sites or carrying water and soil samples, first aid kit, paperwork, tools, hand tools, drinking water, file boxes, books, code folders, site plans, site documents, and review materials to permit-applicant meetings, or to the car when making a field investigation. Employee has access to equipment such as wheelbarrows and motorized equipment in the field to reduce carrying.

Lifting 11-20 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 5 seconds at a time for up to 10 minutes total in a work shift. Most commonly occurs with weights of 15-20 pounds while wearing a work vest and holding an auger, shovel, measuring tape, or backpack with various tools and equipment. The employee may also lift a bag containing documents and a clipboard that weighs up to 20 pounds.

Carrying 11-20 pounds

Health Care Provider initials if restricted _____

Frequently for up to 20 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 15-20 pounds while wearing a work vest and carrying an auger, shovel, electrofisher, measuring tape, or utilizing a backpack with various tools and equipment. Employee has access to equipment such as wheelbarrows and motorized equipment to reduce carrying.

Lifting 21-50 pounds

Health Care Provider initials if restricted _____

Rarely to occasionally for up to 5 seconds at a time for up to 5-10 minutes total in a work shift. Most commonly occurs with weights of up to 50 pounds while wearing a work vest and holding an auger, shoulder bag, shovel, measuring tape, and a backpack containing various tools, equipment, and water and soil samples. The employee also moves straw bales, plants, rolls of fabric etc.

Carrying 21-50 pounds

Health Care Provider initials if restricted _____

Rarely to Occasionally for up to 10 seconds at a time for up to 5-10 minutes total in a work shift. Most commonly occurs with weights of up to 50 pounds while wearing a work vest and holding an auger, shoulder bag, shovel, measuring tape, and a backpack containing various tools, equipment, and water and soil samples. The employee also moves straw bales, plants, rolls of fabric etc. Wheelbarrows and motorized equipment are available to reduce carrying.

Pushing and Pulling

Health Care Provider initials if restricted _____

Occasionally for up to 2 minutes at a time with a force of up to 50 pounds for up to 30 minutes total in a work shift while using an auger or shovel, broom, pry bar, wheelbarrow, moving equipment on shelving, moving logs and debris off trails, as well as opening and closing office and County vehicle doors.

Handling

Health Care Provider initials if restricted _____

Occasionally for up to 10 minutes at a time for up to 1 hour total in a work shift while driving, carrying work tools, auger, shovel, 100-foot measuring tape, camera, Munsell soil color chart, field notebook, file boxes, books, plans, site documents, other items on tool list, and review materials. Approximately 40% of time is spent out of the office working in the field.

Operating Controls with Hands

Health Care Provider initials if restricted _____

Frequently for up to 1.5 hours at a time for up to 3 hours total in a work shift while driving, carrying work tools, using the computer mouse, GPS unit, Survey rod, electric cart, camera and County vehicle. Approximately 40% of time is spent out of the office working in the field.

Fingering

Health Care Provider initials if restricted _____

Frequently to Continuously & highly repetitive for up to 1.5 hours at a time for up to 4-5 hours total in a work shift while performing computer duties, handwriting notes, and manipulating documents, using a camera, using a Munsell soil color chart, using other items on tool list, and writing field notes. Approximately 40% of time is spent out of the office working in the field.

Feeling

Health Care Provider initials if restricted _____

Occasionally for up to 10 seconds at a time for up to 5 minutes hours total in a work shift while feeling consistency of soils.

Talking

Health Care Provider initials if restricted _____

Frequently for up to 30 minutes at a time with for up to 4 hours total in a work shift while instructing and directing workers/students as well as conversing with clients and co-workers, answering the telephone, participating in meetings and giving presentations.

Hearing

Health Care Provider initials if restricted _____

Continuously for up to 2.5 hours at a time for up to 7.5 hours total in a work shift while driving a County vehicle, conversing with contractors, workers, students and clients, co-workers, attending public hearings, answering the telephone and identifying potential hazards such as moving/falling objects at construction sites, safety sirens from equipment etc.

Seeing

Health Care Provider initials if restricted _____

Continuously for up to 2.5 hours at a time for up to 7.5 hours total in a work shift while performing computer duties as well as reading and reviewing maps, plan and documents, evaluating geologic formations, driving a County vehicle and walking on uneven and undeveloped land with tripping hazards such as logs, plants and sunken ground.

Working with Heightened Awareness

Health Care Provider initials if restricted _____

Continuously when working in the field for up to 2.5 hours at a time for up to 7.5 hours total in a work shift while working in the field which may include working along roads, on steep slopes and working around heavy moving equipment such as drill rigs. The employee needs to have heightened awareness when overseeing students and workers. Most commonly occurs while sampling and studying soil on undeveloped land. Approximately 40% of time is spent out of the office working in the field.

ENVIRONMENTAL FACTORS

Work is performed in an office as well as a rural setting, industrial sites, commercial sites, residential sites, and uneven topography where grading of the ground surface is underway. The worker traverses uneven and heavily wooded terrain with many tripping hazards and overhead

hazards. The employee also traverses undeveloped land or construction sites. Approximately 40% of time is spent out of the office working in the field.

The noise level is

Approximately 90 decibels. The noise is caused by machinery, power tools, striking hand tools (e.g., hammer).

HCP Initials if Restricted

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Work environment may include the following exposure(s):

- Outside weather: Frequently
- Wet: Frequently
- Humidity/dampness: Rarely
- Fumes: Occasionally
- Odors: Occasionally
- Dusts: Occasionally
- Mists: Rare
- Gases: Rare
- Moving mechanical parts: Occasionally
- Vibration: Occasionally
- Working in high, exposed places: Occasionally

HCP Initials if Restricted

POTENTIAL MODIFICATIONS TO JOB

Motorized equipment and a wheelbarrow are available to reduce carrying. Work crews are available to assist lifting, carrying, pushing/pulling, etc. when working in the field.

SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Printed name & title of VRC evaluator

Signature of VRC evaluator

Date

Printed name & title of contact

Signature of contact

Date

Printed name & title of contact

Signature of contact

Date

HEALTH CARE PROVIDER SECTION
Check all that apply

- The employee is released to perform the described duties without restrictions on performance or work hours as of _____.

- The employee is released to perform the described duties on a reduced schedule as of _____. The recommended schedule is:
_____ Temporary until _____ Permanent as of _____

- The employee is released to perform the described job with the following modifications:

_____ Temporary until _____ Permanent as of _____

- The employee is not released to perform the described duties due to the following job functions:

_____ Temporary until _____ Permanent effective _____

- The employee is unable to work in any capacity.
A release to work is: anticipated by _____ Not expected

The limitations are due to the following objective medical findings:

Printed or typed name and phone number of Health Care Provider _____

Signature of Health Care Provider _____ Date _____