Resume of Qualifications

John Lee Marshall 2215 SE Miller Street; Apartment # 11

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Work Experience

Environmental Protection Agency 1200 Sixth Avenue; Suite 900 Seattle, WA 98101 02/2012 – 09/30/2014

Salary: \$ 2,030.00 per Month

Hours per week: 40

SEE - Puget Sound Clean Water Act Inspector Supervisor: Krista Rave-Perkins (206-553-6686)

Conducted Section 404 Clean Water Act (CWA) inspections at sites reported as possible unauthorized discharges into Waters of the US (WOUS), both in the Puget Sound area and eastern Washington and Idaho. I provided inspection training and enforcement response services to six tribes. I used JavaScript, html, and CSS to prepare educational materials for web pages accessible to tribal and local community workshop participants and created and disseminated relational databases and geodatabases made to compile GIS data for analysis and mapping of inspection sites.

I provided technical assistance and GIS analyses for several EPA Region 10 enforcement team projects involving potential CWA 404 violations in the Puget Sound and other parts of EPA Region 10 as needed. I developed a raster model Puget Sound Priority Inspection in a File Geodatabase for determining the areas inside the Puget Sound 4th Field Hydrologic Units with the largest number and most sensitive EPA trust resources potentially adversely compromised by Clean Water Act violations. The technical assistance I provided to the enforcement team included but is not limited to the collection of field data at sites designated for remedial violation work and evaluating the data against the performance standards that had been established; providing geoprocessing and mapping support to help inform Clean Water Act jurisdictional determinations; interpreting and mapping historical vegetation data; using Oregon Biodiversity Information Center GIS data to inform analyses in enforcement cases; and acquiring LiDAR data to inform terrain view and analyses and to create TIN vectors to calculate unauthorized fill volume and area metrics.

Oregon Department of State Lands 775 Summer Street NE; Suite 100 Environmental Specialist Salem, Oregon 97301 03/2010 - 08/2010

Salary: \$2,600 per month Hours per week: 40 Environmental Specialist

Supervisor: Lori Warner-Dickason (503-986-5271)

EPA Grant-funded single project assignment to look at sub-set of 2010 Removal-Fill Law permitted projects and determine compliance with their permit conditions. Developed a geodatabase to contain and report findings. Used GPS-unit to geo-reference permit application sites and populate attribute tables for use in the geodatabase.

U.S. Fish and Wildlife Service 2600 SE 98th Avenue; Suite 100 Portland, OR 97266 01/2000 - 01/2010

Salary: \$87,000.00 Per Year

Hours per week: 40

Fish and Wildlife Biologist

Supervisor: Joe Zisa (503-231-6179)

Represent the Fish and Wildlife Service on:

- 1. Interagency Review Teams for Mitigation Banking, Conservation Banking, and In-Lieu Fee Program. Mitigation Banking and Fee-in-Lieu Program actions are authorized in Oregon primarily under Sections 404 and 401 of the Federal Clean Water Act and the State Removal Fill Law. Fish and Wildlife Service involvement is primarily authorized under the Fish and Wildlife Coordination Act, National Environmental Policy Act, and the Federal Endangered Species Act;
- 2. Review and comment on U.S. Army Corps of Engineer Section 10 Rivers and Harbors Act and Section 404 Clean Water Act Permit Public Notices primarily per the combined authorities of the Fish and Wildlife Coordination Act and the National Environmental Policy Act;
- 3. Review and comment on locational and design level Environmental Impact Statements and Environmental Assessments related to major transportation projects;
- 4. Over six years of working on transportation related regulatory streamlining with the Collaborative Environmental and Transportation Streamlining group (CETAS) during which time a charter agreement and a major transportation projects agreement was developed and signed by the directors of all agencies represented at the negotiation table;
- 5. Working with interagency stakeholders to assist the Oregon Department of Transportation efforts in completing a Statewide conservation and mitigation banking strategy;

- 6. Organizing a scientific technical advisory committee and to help design and write a draft vegetation monitoring protocol and performance standards for application at mitigation banks;
- 8. Providing calculation procedures in an Excel spreadsheet as a template and further assisting the development of a vegetation manager relational database (VEMA) for analyzing and reporting vegetation data;
- 9. Providing a framework to begin exploring conservation banking for threatened and endangered species;
- 10. Providing staff level support regarding policy on the demarcation and proportioning of credit allotments necessary between publicly funded restoration projects and mitigation or conservation bank projects;
- 11. Providing education and outreach on FWS regulatory roles under the Fish and Wildlife Coordination Act, the National Environmental Policy Act, and the Endangered Species Act;
- 12. Participating in a Statewide Programmatic General Permit (SPGP) development effort intended to give the State of Oregon oversight of a limited set of activities authorized under the Federal Clean Water Act while retaining necessary Federal legal requirements and oversight;
- 13. Representing the FWS during Nationwide Permit reauthorization efforts;
- 14. Providing interagency review team with beta GIS projects for consideration of use in mitigation bank planning and monitoring; and
- 15. Providing guidance on mitigation policy reform to the Portland District Corps and EPA and follow through post 2001 NAS Report and NWMAP.

U.S. Fish and Wildlife Service 2600 SE 98th Avenue; Suite 100 Portland, OR 97266 01/1996 - 01/2000 Salary: \$54,000.00 Per Year Fish and Wildlife Biologist

Represented the FWS by:

- 1. Participating on an advisory committee helping to write the 1996 Oregon Administrative Rules on Mitigation Banking;
- 2. Helping to write the interagency mitigation bank guidebook for Oregon;
- 3. Participating on an advisory committee helping to write the Oregon Department of Fish and Wildlife Administrative Rules on Mitigation;

- 4. Reviewing and commenting on Corps of Engineers Section 10 Rivers and Harbors Act and Section 404 Clean Water Act Public Notices per FWS authority under the Fish and Wildlife Coordination Act; 5. Reviewing and commenting on EIS and EA documents concerning major transportation projects and Port development.
- 6. Participating on mitigation bank review teams overseeing the writing and signing of mitigation bank instruments and MOAs;
- 7. Participating on an interagency Oregon Estuary Working Group and helping develop guidelines for protecting eelgrass from adverse impacts from oyster culture n Oregon Department of Agriculture oyster leases;
- 8. Participating in the Columbia River Estuary Program Comprehensive Conservation Management Plan (CCMP) development and on the design of long term estuary monitoring strategies;
- 9. Participating in the development of the Tillamook Bay Estuary Program CCMP and science work groups;
- 10. Providing oversight of a grant to fund field research on the development of intertidal areas post dike breaching in the Kunz Marsh reaches of Coos Bay in Southwest Oregon; and
- 11. Participating as technical advisor and A-team member regarding efforts to develop wetland hydrogeomorphic classification and assessment documents for the Willamette Valley, Oregon.

U.S. Fish and Wildlife Service 2600 SE 98th Avenue; Suite 100 Portland, OR 97266 06/1993 - 01/1996

Salary: \$33,000.00 Per Year

Hours per week: 40

Fish and Wildlife Biologist Supervisor: Pat Wright

Represented the FWS by:

- 1. Providing technical assistance to the advisory committee writing the Oregon Administrative Rules for Statewide Land Use Planning Goal 5;
- 2. Providing technical assistance to the State of Oregon on wetland conservation plan, local wetland inventory, and mitigation guidelines;
- 3. Providing technical assistance to the City of Eugene and City of Warrenton on their wetland conservation planning efforts;

- 4. Helping the State of Oregon on their wetland restoration program policies and technical strategies;
- 5. Providing review and comment on the Dunes National Recreation Area Draft Environmental Impact Statement to the U.S. Forest Service;
- 6. Providing written comments relating to physical, ecological, and economic baseline conditions for projects funded and documented in the Pacific Coast Wetland Joint Venture Program;
- 7. Reviewing and providing FWCA recommendations on Section 10 Rivers and Harbors Act and Section 404 Clean Water Act Corps Public notices;
- 8. Providing technical assistance to Oregon Department of Environmental Quality efforts to develop water quality standards for discharges into wetlands; and
- 10. Providing technical assistance to the State of Oregon on criteria to identify outstanding wetlands and other waters of the State.

Oregon Department of State Lands 775 Summer Street NE; Suite 100 Salem, Oregon 97301 Environmental Specialist \$ 12,000 per year 12/1992 - 06/1993 Hours per week: 30

Supervisor: Ken Bierly (503-986-0182)

I was hired to assess and provide reports on the status of the monitoring efforts at the Astoria Airport Wetlands Mitigation Bank and to make recommendations on future monitoring efforts:

- 1. I reviewed existing data involving bird use, vegetation surveys, and elevation surveys. Using Microsoft Excel software, I borrowed a numerical algorithm I created and used in my master's thesis to: a) establish a numerical habitat classification and b) establish a habitat value index based on horizontal and vertical stand structure and species diversity. I then used vegetation sample plots to infer the index to habitat polygons based on FWS Cowardin Classification. Finally, I compared the derived index for each habitat to the relative percent use of those habitat types by birds;
- 2. I used simple Excel logic formulas to assign habitat indicator status to several bird species based on the bird/habitat use data collected;
- 3. I made recommendations on how to potentially use numeric habitat structure indexes to better represent species/habitat relationships;
- 4. I used the vegetation plot data to establish a moisture index (based on number equivalents to FWS wetland plant indicator species lists) and a salinity index (numerically based on

Hutchinson's salt tolerances for plant species) for the different plant sample plots, transects, and polygons. This data revealed a distinct change from pre-dike breach indexes and post dike breach indexes but there was only one year of baseline data and the samples were not collected randomly so the validity of a causal trend could not be verified.

5. I arranged a site visit with a Portland State University geologist to collect substrate cores to detect buried peat horizons. At least two were found and different elevations in the soil profile and each with a sand layer overlying the peat confirming this area was undergoing cyclic uplift and sinking associated with coastal tectonic processes and that the site had undergone significant elevation rise since the building of dikes in that area near the turn of the century.

Mt. Hood Community College 26000 SE Stark Street Gresham, Oregon 97030 Community College Instructor \$390.00 per month 10/1992 - 12/1992 Hours per week: 15

Supervisor: Michael Durrer, Jr. (503-491-7295)

I was an instructor for one-half of a two-part integrated resource class in the MHCC Engineering and Industrial Technology Division (Forestry). My subject material focused on the biological, physical, and chemical characterization of streams and wetlands. We spent a great deal of time looking at the causal relationships between human activities and the degradation of aquatic resources. I taught two one-hour lectures and one three-hour lab each week.

Washington Department of Ecology 300 Desmond Drive SE; Ste 102 Lacey, Washington Wetlands Resource Specialist \$31,200 per year 12/1989 - 04/1992 Hours per week: 40

Supervisor: Andy McMillan (360-407-7272)

My duties included:

- 1. Section 401 Clean Water Act certifications, including nationwide permits;
- 2. Review and approval of wetland identification and delineation reports;
- 3. Shoreland Management Act jurisdiction determinations;
- 4. Review and approval of local wetland inventories;

- 5. WDOE representative on the Mill Creek Special Area Management Plan;
- 6. WDOE representative on interagency efforts to initiate Washington Department of Transportation mitigation banking pilot project;
- 7. Technical assistance to local governments relating to wetland model ordinances and the State Environmental Policy Act; and WDOE representative on a non-native invasive aquatics plant committee.

Oregon Department of State Lands 775 Summer Street NE; Suite 100 Salem, Oregon 97301 Environmental Specialist \$26,400.00 per year 11/1987 - 11/1989 Hours per week: 40

Field Enforcement Inspector

Supervisor: Earle Johnson (503-378-3805)

My duties included:

- 1. Discovery of the Removal-Fill Law violations through private citizen and agency reporting;
- 2. Conducting office and field investigations that required knowledge and skills in identifying hydric soils, hydrophytic plants, and saturation or inundation during the growing season. Previolation aerial photos were commonly used in conjunction with soil survey reports and other information sources to aid in the investigations;
- 3. Helping violators to design and implement viable remedial actions to restore former wetland conditions;
- 4. Providing expert testimony for the State of Oregon during contested case hearings. Preparation for these hearings often required close work with the State Attorney General's Office and Oregon State Police:
- 5. Resolving high priority State/Federal cases in cooperation with enforcement staff from the Portland District Corps of Engineers and the Environmental Protection Agency;
- 6. Conducting some of the early field work in preparation for the development of the West Eugene Wetland Conservation Plan;
- 7. Developing and organizing a volunteer monitoring effort at the Astoria Airport Wetland Mitigation Bank; and

8. Interviewing and documenting comments by stakeholders on their perceptions of various aspects of mitigation as applied under the State Removal-Fill Law.

Columbia River Estuary Study Taskforce 750 Commercial Street, Room 205 Astoria, Oregon 97103 12/1986 - 11/1987 \$18,000.00 per year Hours per week: 40 Coastal Planner/Intern Supervisor: David Fox (503-325-0435)

My duties included:

- 1. Staff reports for several local bridge replacements;
- 2. Organizing and conducting a public and interagency review process to aid in the development of a revised 1987 Columbia River Estuary Mitigation and Restoration Plan and subsequently acting as primary author in the writing of the final document. This effort included extensive candidate mitigation and restoration site inventory, land owner contacts, developing draft planning procedures and policies for local government review for adoption, providing mitigation credit/debit accounting methods, addressing regulatory takings issues, and providing conformance with State and Federal laws and policies, etc.
- 3. Providing technical recommendations to help inform language used in the Oregon 1987 Mitigation Bank Act.

Education

University of Washington Seattle, WA United States Geography 09/2016 - 06/2018GPA 3.97 of a maximum 4.0 Credits Earned: 35 Quarter hours

Major: Geographic Information Systems – Sustainability

Courses: GIS Data Management, GIS Problem Solving, Principles of GIS Mapping, Geospatial Statistical Data Analysis, GIS Python Programming, GIS Decision Making.

Portland State University Portland, OR United States Geography 03/2011 GPA: 3.6 of a maximum 4.0

Credits Earned: 20 Quarter hours

Major: Geographic Information Systems - Graduate Certificate

Courses: Introduction to Geographic Information Systems; Digital Compilation and Database Design; Building a GIS Database with GPS; Advanced Geographic Information Systems; Maps, Models, and GIS.

Oregon State University Corvallis, OR United States Geography June 1985

GPA: 3.4 of a maximum 4

Credits Earned: 72 Quarter hours

Major: Geography

Master's Thesis: Value Assessment of Jackson-Frazier Wetland, Benton County, Oregon; A

Case Study.

Courses: Cartography; Geography of Land Use; Water Resource Geography; Ecological Biogeography; Automated Geographic Data Manipulation; Science of Geography; Wetland Ecology; Plant Taxonomy; Vegetation Field Methods; Economic Geography; Man and Wildlife; Scientific Research Design; Vegetation Mapping; Applied Urban Geography; Soil Morphology; Statistical Methods.

Oregon State University Corvallis, OR United States School of Forestry - Resource Recreation Management June 1979 GPA: 3.0 of a maximum 4.0

Credits Earned: 229.5 Ouarter hours

Courses: Wildlife Resources – Birds; Soils and Men; General Botany; Graphic Design; Principles of Wildlife Conservation; Recreational Use of Public Lands; Backcountry Recreation Use Field Methods; Environmental Interpretation; Wildlife Resources – Mammals; Environmental Education; Park and Recreation Administration; Multi-Media Presentations; Introduction to Forest Ecology; Dendrology; Introduction to Forestry; Introduction to Geology; Aerial Photo Interpretation; Soils and Land Use; Introduction to Oceanography; Bioecology.

Job Related Training

Applications Developer Certificate at Renton Technical College -2015 C#, SQL, JAVA, javaScript, HTML, CSS, Visual Basic programming languages Microsoft Access and Microsoft SQL Server RDMS design and development.

Microsoft Office Specialist for Office Access - November 2011.

Professional Publication

Marshall, J., D. Fox, and H. West. 1987. A Mitigation and Restoration Plan for the Columbia River Estuary, Columbia River Estuary Study Taskforce, Astoria, Oregon.

Other writing, presentation, and web page examples available at: http://www.mitigationcreditdebit.com/