

Engaging Active-Duty Service Members in Habitat Restoration, Rare Species Conservation, and Ecological Science



Dennis Buckingham

JBLM DPW/ED Fish & Wildlife
Colorado State University, CEMML



Center for
Environmental
Management
MILITARY LANDS
Colorado State University

Joint Base Lewis-McChord



Joint Base Lewis-McChord

99,000 acres

Rare habitats

- Puget lowland prairies
- Garry oak woodlands

• Ponderosa pine

• ~~Artisan~~ wetlands

• Salmon bearing streams

38 rare/listed animal species

• ESA endangered butterfly

• ESA threatened gopher and lark



Operation Wildlife

Participants

- Active duty personnel
- College students
- Veterans
- Military spouses



Operation Wildlife

Participants

- Active duty Soldiers/Airmen
- College students
- Veterans
- Military spouses

Culture

- Civilian style transition environment
- Teaching circles
- Bridging ideological divides
- Leadership development



Operation Wildlife

Fire

Firefighters – 184

Fire unit prep - 126

Co-Use - 23

Burn scar seeding - 21

Post burn mowing - 17

2019 Project Support
(participant/days)



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Birds

Bluebird nest success surveys - 94

Purple martin towers/surveys - 62

Wood duck boxes/surveys - 51

Bluebird box cleanouts - 31

Nest box construction - 10



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TCB occupancy transects - 36

WDFW TCB support/release - 24

TCB survey flag placement - 11

TCB release w/WDFW - 10



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Mammals

Squirrel surveys - 61

Gopher surveys - 52

Bat evening counts - 21

Bat box install - 12



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Amphibians, reptiles, fish

- Egg mass & funnel trap surveys - 72
- Western pond turtles w/WDFW - 71
- Western toad searches - 38
- Salmon surveys - 36
- Morey bypass upkeep - 13



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Wetlands

Beaver dam removal - 16

Willow staking - 14



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Prairies

- Edge enhancement - 65
- Plug planting - 49
- Seed predation study w/MES - 33



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Weeds

Holly/ivy control - 49
Deadheading, spraying, etc. - 40
English hawthorn removal - 33
Invasive forb surveys - 30
Herbicide training/testing - 26
Blackberry mow/spray - 24
Aquatic species control - 21



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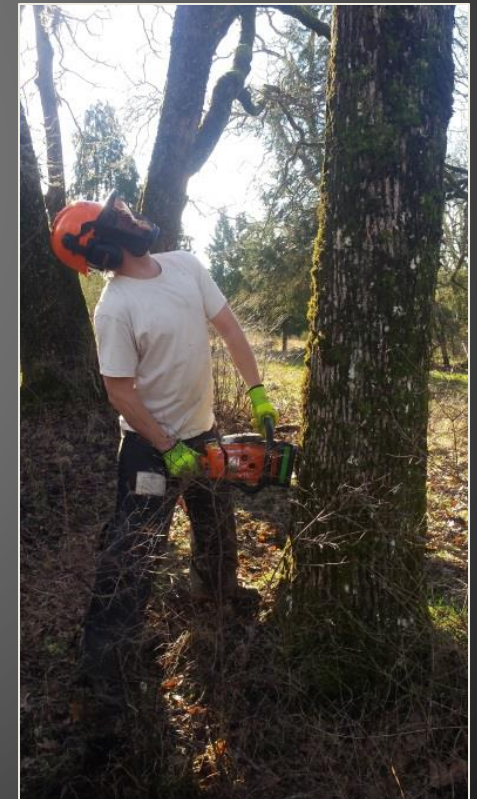
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Forests

Timber sale surveys - 111
Sapling maintenance - 92
Oak woodland transects - 81
Oak sapling maint. - 55
Timber cruise/markings - 47
Stand development surveys - 24



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Misc.

Safety/equipment training - 46

Herbicide training/licensing - 26

Firefighter training - 24

Vehicle/tool maintenance - 16



Summary 2019

- 2031 Total volunteer/days
- 16,248 total hours
- 10.9 volunteers per day
- \$413,187 total labor equivalency
- 27 Service members (20 Army, 6 Air Force, 1 Navy)
- 22 Veteran college students
- 38 Civilian college students
- 5 Military spouses



Summary 2014-2020

- 8,866 Total volunteer/days
- 70,928 total hours
- 6.8 volunteers per day
- \$1,929,242 total labor equivalency (2020 Dollars)
- 144 Service members (124 Army, 19 Air Force, 1 Navy)
- 46 went on to college (22 for environmental science)
- 30+ have environmental jobs
- 7 work in veterans therapy
- 8 work on JBLM
- Estimated overall 90% transition success



Career Skills Program Partners



Direct Memo



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, JOINT BASE LEWIS-MCCHORD
1010 LIGGETT AVENUE, BOX 339500, MAIL STOP 1AA
JOINT BASE LEWIS-MCCHORD, WA 98433-9500

DATE

MEMORANDUM OF UNDERSTANDING

SUBJECT: Employment of **Rank & name** (XXX-XX-last 4) at JBLM Fish and Wildlife

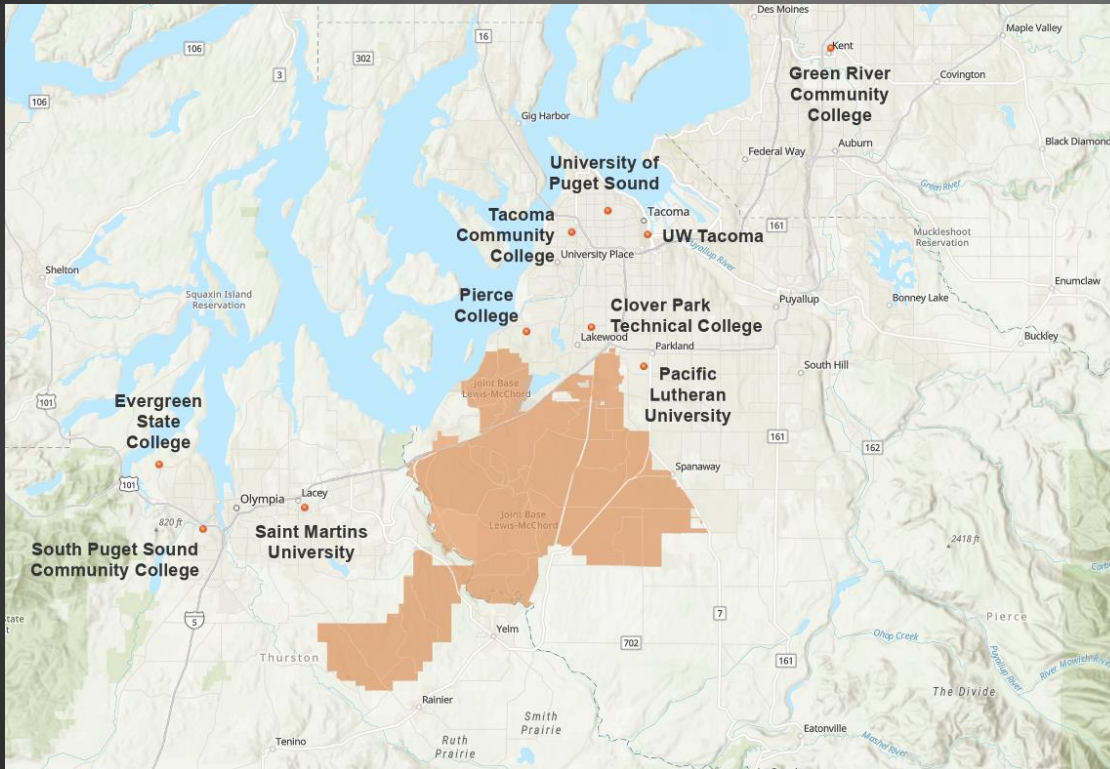
1. The purpose of this memorandum is to certify JBLM Department of Public Works, Environmental Division, Fish and Wildlife (F&W) Branch as the primary place of duty for **Rank & name** under the F&W internship program, from **start date goes here**, until removal from duty position.
2. The details for **Rank & name** employment with F&W are:

Location: BLDG 1210 Mann Avenue, JBLM, WA 98433
Duty Schedule: 0800-1700 daily, M-F
Primary Supervisor: Jim J. Lynch (DoD CIV GS-11, Lead Program Biologist)
Supervisor Contact: 253-966-6440
Date of Employment: **start date goes here** until removed from duty position
3. Duties include: Habitat restoration, prescribed fire support, amphibians/wetland monitoring (funnel trapping, egg mass searches), cavity nesting bird surveys, nest box placement and monitoring, salmon surveys, oak woodland forestry, rare species population and habitat mapping, invasive species control, and many other activities to support the military mission by ensuring compliance with US Fish & Wildlife Service regulations for training land management.
4. **Rank & name** will remain ADCON to **full unit address goes here** for all administrative actions and requirements.
5. The point of contact for this memorandum is Dennis Buckingham at JBLM Fish & Wildlife, dennis.a.buckingham.ctr@mail.mil or (360-631-8556).

Battalion CO
Signature Block

Battalion CSM
Signature Block

Colleges



On map:
Clover Park Technical College
Green River College
Pacific Lutheran University
Pierce College
South Puget Sound Community College
Saint Martins University
Tacoma Community College
The Evergreen State College
University of Puget Sound
University of Washington – Tacoma

Off map:
Oregon State University
University of Washington
Washington State University
Western Washington University

Future Directions

National Expansion

- Legacy Project
- Seeking partners
- CEMML as a mechanism
- JBLM as a regional/national hub



“When I get settled on my property in Tennessee, I’m planning to make some butterfly habitat on my hillside like that spot we’ve been working on.”

-SSG Derrick Hatfield
Infantryman, Drill Instructor & Counter Intelligence Agent
(Iraq, Afghanistan)

“When I got back from Afghanistan I was hurt bad and pretty depressed about my life. Now I wake up excited about my day for the first time I can remember.”

-SGT Ron Rudolph
Mortarman
(Afghanistan)

“I think my memory’s coming back, man. It’s weird, you know? I’ve been having peaceful dreams lately and I think all this nature is helping.”

-SGT Justin Manley
Infantryman
(Afghanistan)

“I been going home happy at night, and I’ve been playing with my kids more. Last night my wife said our marriage might work out after all. She was joking, but kinda serious, you know?”

-SPC Charles Wells
Infantryman
(Afghanistan)



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