



**GUIDE FOR FISHERIES RESEARCH AT:
JOHN DAY/WILLOW CREEK PROJECT**

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INTRODUCTION

This document is for researchers to follow while conducting studies on and around the John Day Dam project. With ever-expanding fisheries research, special attention must be given to the coordination and communication of all such activities with the dams' Operations to prevent conflict. Researchers should understand they are not the only crew working on the project. They will be expected to cooperate with other scientists, dam operations, maintenance, construction personnel, etc. **The safety concern cannot be overemphasized, and it will be the primary factor in allowing you to continue your work.** The following requirements are to enhance safety, security, and efficiency, but please be aware

+they may change at any time.

Please note that the pre-work coordination is divided into two categories:

A - To be conducted at District level

B - To be conducted at the Project with Project Biologist.

A. Coordination at the Portland District level.

No work at the project may start until the Corps Portland District provides a written affirmative response to your request. The first step required for conducting fisheries research is to submit a formal letter to the John Day Dam Operations Project Manager (OPM) requesting access to the project. This letter must be sent at least **one month in advance.** The letter should include a general description of proposed research, a work plan, and any coordination steps that have already been accomplished at the regional, division, or district levels.

Formal letters should be addressed to:

Brett Call, OPM
John Day Dam
U.S. Army Corps of Engineers
P.O. Box 823
Rufus, OR 97050

Email it to Erin Kovalchuck at Erin.H.Kovalchuck@usace.army.mil

The following items are required to be attached to the letter, and are also to be provided to the Project Research Coordinator at least two weeks before any work starts:

- Project work plan including a preliminary schedule of your activities.
- Project impact statement.
- Job hazard/safety analysis.
- Material Safety Data Sheet(s) (MSDS).
- ESA documents and permits (when applicable.)
- State collectors permit (when applicable).
- Funding arrangement for project support (if necessary.)

PROJECT WORK PLAN

A project work plan should include a detailed description of all planned activities and work to be performed. This should include blueprints and/or schematics for all major mechanical or electrical devices intended to be installed.

PROJECT IMPACT STATEMENT

The project impact statement should include effects that research work may have on normal project operations, maintenance, and safety.

JOB HAZARD SAFETY ANALYSIS

In accordance to the Corps' Safety Manual, all activity groups are required to provide a Job Hazard Safety Analysis prior to starting work. A new hazard analysis must be provided for review each year.

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS's must be obtained for all hazardous materials brought on the project. To acquire the proper forms and information, contact Samantha Strevy, Environmental Protection Specialist, at (541) 739-1129. First aid kits must also be supplied as specified in the MSDS. Researchers must dispose of their own hazardous chemicals unless otherwise agreed to by the Project. All accidental spills of hazardous chemicals/oils are the responsibility of the contractor and must be reported to the Control Room immediately.

FUNDING ARRANGEMENTS

Research related work, that requires project support, needs funding arrangements before assistance can be provided. Two weeks to several months advance notice is necessary, depending on the amount of project support. **All support requests must**

be cleared through the Project Biologist, do NOT approach the maintenance crews on your own.

B. Additional coordination required at the Project level is to be provided directly to the Project Biologist (this must occur at least two weeks in advance of any work commencing here, particularly critical for diving activities.)

SECURITY AND IDENTIFICATION

Access to the project is restricted to the general public and is limited to authorized personnel only. Do NOT contact the security guards at the entrance gates directly to obtain any authorization since they are not responsible for the management decisions. All security related issues need to be directed to and processed exclusively through fisheries staff.

All personnel must be identified through their full name, DOB, POB, citizenship, driver's license #, home address, supervisor's phone and business affiliation typed on the separately attached visitor security form (one per person) and sent to the research coordinator at:

Michael.D.Lotspeich@usace.army.mil

Only US citizens and legal residents can be approved locally for the project access. All foreign nationals need to submit their access request to the Portland District Security Office first (their processing may take 6 to 8 weeks so start well in advance!) and then provide personnel information to the project after that approval is granted.

The project's picture ID will be issued to all authorized personnel, and you will need to contact the Project Biologist to make an appointment for that.

Complete lists of the personnel names, vehicles, and boats accessing the project are to be provided to the Project Biologist. Vehicles must be identified through manufacturer, color, make, year, and license number. Boats used in the Boat Restricted Zone (BRZ) must be identified through size and registration number.

All authorized personnel are required to stop at the security guard station upon entering and leaving the project each time, including the multiple entries during the same day to be checked off on a daily list. A government issued ID is required from all personnel entering the project. A supervisor is required to ensure that all crew members **have their IDs with them at all times** while working within the

project boundaries.

Additionally, identification with hard-hat insignia is preferred for ease of group recognition. Northern pikeminnow anglers are required to wear the uniform identification while working in public view.

Volunteer services for fish related activities must be approved through the Project Biologist; a special event permit will be issued. All other visitations of fish related areas, that are not open to the general public, will be approved through the Project Biologist.

Keys and key cards will be provided when necessary; they will be issued at the lowest security level necessary to accomplish your work. The number of keys requested per group should be kept to a minimum due to security and safety concerns. Issued keys are expected to be returned to the Administration Office immediately after completion of your research activity.

GENERAL SAFETY

- Weekly safety meetings are required to increase safety awareness and a schedule of their topics needs to be provided to the Project Biologist.
- All employees must have CPR and First Aid training, and certification will be provided to the Project Biologist.
- All reportable accidents are to be immediately reported to the Control Room, Project Biologist, and Project Manager.

RESEARCH DELIVERIES

The researchers are responsible for receiving their own deliveries. Deliveries' notifications (including the name of the company, type of vehicle, and driver's name) need to be given to the Project Biologist prior to the arrival date.

MEDIA REPRESENTATIVES' ACCESS

Any media visits need to be coordinated in advance through the COE Portland District, Public Affairs Office. Call them at 503-808-4510 to obtain their permission at least one week in advance to allow for proper planning.

PAGERS

While working on the project **all research crews must have pagers**; this is an

OSHA requirement and they are used to alert personnel to potential emergencies. It is the financial and logistic responsibility of researchers to buy their own pagers which are to be **purchased only through** Apollo Pagers: Apollopagers.com. The model is: Gold AL-A25 ALPHA NUMERIC PAGER. After you buy them, the pagers need to be turned in to the Project Biologist to be properly programmed before use.

RESEARCHER SIGN-IN

Researchers are required to sign in and out at the SMF each day. This is to ensure all personnel can be accounted for in case of an emergency. The sign in book is located at the entrance of the SMF building.

SAFETY WEAR

When working within the project boundaries, with the exception of office areas, all research personnel must wear hard-hats, safety footwear, safety glasses, long pants and shirts (no tank tops.) Researchers working on boats must wear coast guard approved Personnel Floatation Devices (PFD.)

VEHICLE SAFETY

Vehicle speed limits are posted throughout the project and must be obeyed. Extra caution is required around all working cranes and the crane operators must be aware of your passage. Please stop and proceed only if waved through by them. There may be times when passage of the forebay deck will not be possible due to crane work. In this case researchers will have to find an alternate route to the other side of the project or wait until the crane work is finished.

CONTRACTED CRANE SAFETY

All contracted cranes must be inspected before starting work at the project. If a critical lift (includes all man basket use) is planned, a weight test is required as well. A research group hiring the crane is responsible for the proof of those inspections according to the guidelines provided by the Project Biologist. The appropriate forms to be filled out by the crane operator are attached and need to be turned in to the Project Biologist.

BOAT SAFETY

Boats must meet all Coast Guard requirements before entering the projects Boat Restricted Zone (BRZ.) **Researchers working on boats must wear coast guard approved Personnel Floatation Devices (PFDs) at all times.** Hard-hats and safety footwear are not always required when working on a boat. A red and white triangular research flag must be flown at all times while in the BRZ for

identification.

The control room must be contacted upon entering and leaving the BRZ each time, including multiple entries in the same day. Radio contact must remain open at all times when in the BRZ. The project does not allow entrance into the special restricted areas indicated on the maps (attached document). There is to be no activity within 100' of an entrance or exit, directly in, adjacent to, or above a fish ladder unless coordinated through regional fisheries managers through the Endangered Species Act (ESA).

There is to be no entrance within 600' of an open sluiceway or open spillway. The degree of spill may determine the allowable distance of safe entry. A second boat must be present at all times when conducting research in the BRZ for emergency purposes (engine failure or persons overboard). Caution should be practiced when in the vicinity of avian lines because these lines give little clearance for boat traffic. The location of the avian lines is located on the following map (attached document).

Boat work and operations are covered in detail by the Project Boat Restricted Zone Policy, which is attached as a separate document.

OTHER HAZARDOUS AREAS

Shoreline rip rap areas are common around the projects and caution should be exercised for slipping hazards, especially when wet. Public fishing areas pose a danger when sturgeon fisherman cast heavy weights long distances. Boat researchers must be aware of the navlock area for incoming and outgoing barge and miscellaneous traffic.

REFERENCES

Detailed guidance can be found in the following documents:

- OSHA safety requirements can be found in 29 CFR 1910, 1926 and 1960.
- Corps of Engineers requirements can be found in the 'Corps Safety Manual' # EM 385-1-1. Dated 30, November 2014. The Dalles/John Day has supplements for the control of hazardous energy and confined space entry.
- General rules and regulations are provided in the Corps pamphlet EP 1165-2- 316 for May 2000.
- Guidance concerning fisheries operations can be found in the NPD Fish Passage Plan.

- Project Policy

Research cannot conflict with the requirements from the Fish Passage Plan. To ensure full compliance, the coordination of all fish related activities must be conducted through Project Biologist.

PRE-WORK AND PRE –DEMOBILIZATION MEETINGS

(Are required **at least two weeks in advance** of any activity at the project)

A pre-work meeting is to be conducted for each study to clarify work plans and project safety requirements. The project management, operations, security, safety and maintenance crews’ representatives will be invited to attend for more complex projects. A ‘walk through’ tour of the project will be conducted to further clarify the detailed procedures of all activities.

A pre-demobilization meeting is also required to estimate the scope of activities and to schedule equipment removal. This meeting should occur at least two weeks before research termination.

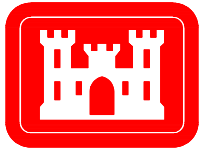
POINTS OF CONTACT

The following is a list of project personnel and their phone numbers. The four-digit numbers are internal project phone numbers.

John Day Control Room (non-emergency)	4211	(541) 739-1050
Project Research Biologist	4861	(541) 506-7861
Project Fish Biologist (Scott Fielding)	4861	(541) 739-1063
Smolt Monitoring Facility, (24/7 passage season)	4861	(541) 506-7861

DON’T CALL 911 DIRECTLY IF YOU HAVE AN ACCIDENT!!!!
Call the above listed SPECIAL emergency #s to request the control room assistance. Calling 911 directly could potentially confuse and slow down the emergency response and therefore isn’t allowed any longer.





Work Over Water Policy

**U.S. ARMY CORPS OF ENGINEERS
JOHN DAY/WILLOW CREEK
PROJECT**



John Day Dam

**Willow Creek
Dam**



Revised January 2012

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WORK ON, OVER, OR NEAR WATER

1. PURPOSE:

Work over or near water occurs often at a hydroelectric facility, adding risk to the work performed by Corps or contractor employees. This Policy examines the ways workers are exposed to this risk, and prescribes the precautions to be taken. Prior to beginning work over or near water, personnel shall have already prepared an Activity Hazard Analysis, attended a pre-work meeting, and contacted the Control Room for coordination and implementation.

This policy details the following procedures:

- a) Boat Restricted Zone (BRZ)
- b) Water Rescue
- c) Boat and Operator Qualifications
- d) Fall Protection

2. SCOPE:

This policy applies to all Corps and non-Corps personnel.

3. REFERENCES:

- a) EM 385-1-1, U.S. Army Corps of Engineers Safety & Health Requirements Manual
- b) ER 385-1-91, Training, Testing & Licensing of Boat Operators
- c) JD Standing Order III, Safe Clearance Procedure
- d) 29 CFR, Parts 1910 General Industry; 1918 Longshoring; & 1926, Construction

4. DEFINITIONS:

- **Activity Hazard Analysis** - The AHA will define the activities being performed and identify the sequence of work, the specific hazards anticipated, the control measures to be implemented, and the personal protective equipment (PPE) to be used.
- **Boat Restricted Zone** - The BRZ at the project is comprised of Outer and Inner Zones. Zone 1 (Outer) is defined by large orange and white signs placed at the shores; and Zone 2 (Inner) is defined as the area close enough to a dam structure (< 600 ft.) as to require reconfiguration of water control equipment to avoid dangerous flow conditions to the boats. Zone 2, therefore, requires compliance with the Safe Clearance Procedures before entering the BRZ. Any person wishing to enter the BRZ must follow the procedures outlined in PARAGRAPH 5, below. Permission to enter the BRZ may be withdrawn due to operational concerns at a moment's notice by the Operating Manager or his/her representative. See Figures 1 and 2 on pages 10 and 11.

- **Fall Restraint System** - Body harness, lanyard and connecting hardware, which can be attached to a solid anchorage point, thereby precluding a fall hazard. EM 385-1-1, Sections 16.T.10 and Appendix Q (definitions).
- **Immediately available** - The lifesaving skiff or rescue boat must be in the water and all systems tested and operational.
- **Lifesaving Skiff** - A vessel used for the rescue of a worker who has fallen from work over water that satisfies the requirements of EM 385-1-1, Section 5.K. As defined in Section 5.I., in locations where the waters are rough, swift, or where manually operated boats are not practical, a powered boat suitable for the waters shall be provided and equipped for lifesaving.
- **Near water** – When a worker is performing work from a shoreline or other surface essentially at the same elevation as the water surface, where a drowning hazard exists.
- **On water** – When a worker is performing work out of a boat or barge, exposed to the risk of falling less than six feet vertically into the surrounding water.
- **Over water** - Work performed from a dam deck, structure, or equipment, where a fall (of more than six feet) would result in entering the river, pool or fishway.
- **Personal Fall Arrest System (PFA)** - A body harness, connecting hardware, lanyard, and lifeline or self-retracting lifeline. EM 385-1-1, Sections 05.H and 21.C. For PFA with retrieval; the system includes a winch (usually hand-operated) by which another worker can hoist a fallen worker to safety.
- **Personal Floatation Device (PFD)** - USCG-approved Type I, III or Type V (no inflatable's), International Orange/Red color, with reflective stripe and PFD light. EM 385-1-1, Section 05.J.
- **Rescue & Work Boat** - Vessels 26' or Less: A vessel satisfying the following requirements: powered by two motors, each capable of driving the boat upstream while fully loaded, at twice the swiftest water velocity encountered inside the Boat Restricted Zone. Each motor must have a separate fuel system (to prevent common fuel contamination). Each motor shall be individually capable of driving the boat and all workers (including those from a work boat) from the work site.
- **Ring buoy** - Life ring with a rope attached (minimum length 70 ft. or longer if appropriate), for worker rescue. EM 385-1-1, Section 05.J.06 (PFD Type IV) and OSHA 1918.97(e)(1).

- **Safe Clearance Procedure** - A definite operating arrangement whereby an Authorized Individual, acting individually or as a representative for a crew, may have designated equipment removed from or held out of service for maintenance or repair purposes under an approved tagout process which insures the safety of the workers involved, until released for service by the same Authorized Individual. The approved process provides protection from hazardous energy sources, which could endanger workers or equipment if energized.
- **Standing Order** - A project written process for accomplishing a standardized task or mission. Vessels greater than 26' shall be sufficiently powered to travel against current while loaded to full capacity with enough freeboard to safely carry its equipment and personnel.

5. BOAT RESTRICTED ZONE PROCEDURES

RATIONALE

Work-related freshwater boating has hazards recognized by most workers. However, work near a dam structure can present additional hazards—sudden, large, natural or man-made, often without warning, and deadly—that originate from flow or environmental changes not evident to the boat's crew. Two scenarios exist where work occurs within the BRZ: working over or near water; and working from a workboat. In both scenarios, a properly staffed and equipped rescue boat shall be immediately available (see definitions for requirements).

PROCEDURE

a. Anyone who intends to enter the Boat Restricted Zone of John Day or Willow Creek project for performing work must apply for permission in writing, at least two weeks in advance of the anticipated entry date. The request must include a schedule, a written work plan, and an Activity Hazard Analysis. The Operations Manager or his/her designate must approve the request prior to entry.

NOTE: for operational emergencies e.g., debris in forebay obstructing a fishway, the Control Room Operator will call out a trained retrieval crew of project employees (see below) to remove the hazard to operations. The responding crew will follow a pre-approved Activity Hazard Analysis; the two-week prior request notification is waived for such emergencies. **The crew will conduct a pre-work meeting in the Control Room.**

b. A pre-work safety meeting will be conducted at the facility prior to the anticipated work. The work leader or supervisor of the boat crew must attend this meeting, and must provide evidence there that the requirements of this Policy have been satisfied.

c. When applicable and practicable, the Control Room Operator will configure dam equipment to minimize flows in the work area. This equipment will be "tagged out" via the dam's Safe Clearance Procedure, thus preventing operation of the equipment during the work. No boat may enter the work area until approval is given by the Control Room Operator. The Control Room Operator has the right to deny entry, if any condition would threaten the safety of the boat crew. The boat crew shall also call the Control Room upon leaving the BRZ.

d. Clear lines of radio communication between each boat and the dam Control Room shall be agreed upon during the pre-work meeting, and established before the boat(s) enter the BRZ.

PERSONNEL

a. The operator of any boat entering the BRZ must provide proof of qualification as a trained, experienced operator of the boat being piloted (provide documentation at the pre-job meeting). A list of qualified project vessel operators is included as Appendix A.

b. The crew of the workboat shall include an operator who will not engage in any other work while piloting the boat. When a workboat is securely tied off in the area of operations, the operator may conduct other activities that do not interfere with the primary responsibility of piloting the boat.

c. **“NOTE”** At least one of the workboat crew and one of the rescue boat crew, other than the operator, must be trained in CPR, first aid, and water rescue procedures.

EQUIPMENT

a. Work boats and rescue boats must meet U.S. Coast Guard safety standards for all boat operating conditions. In addition, each boat shall meet current State and Federal requirements.

b. Work boats and rescue boats must be equipped with the following (EM 385-1-1, 19A):

1. Fire extinguisher--for boats less than 26-ft in length, one 1-A:10-B:C extinguisher; for boats greater than 26-ft in length, two 1-A:10-B:C extinguishers.
2. Personal floatation devices (PFD) for the maximum crew listed for the boat.
3. Running and anchor lights
4. An audible warning device capable of alerting rescue personnel anywhere within the BRZ
5. A marine band radio capable of communicating with the Control Room on Channel 14
6. An approved ring buoy with a minimum seventy-foot throw line (buoyant rope required)
7. An adequately sized towrope
8. A spotlight or acceptable visual distress signal

6. WATER RESCUE

RATIONALE

When a worker faces the hazard of falling in water, Corps safety requirements and project policy necessitate rescue readiness. This procedure defines the requirements for providing rescue actions and post-rescue care of a worker exposed to water immersion.

REQUIREMENTS

- a. Minimum of two crew members dedicated strictly to rescue operations. One operator exclusively dedicated as a boat operator and another rescue crew member trained in cold-water rescue and certified to perform First Aid/CPR.
- b. Crew members of a rescue boat or life-saving skiff must be trained in rescue and post-rescue care procedures. Training for project employees will be made available by project management. Contractors shall include in the Activity Hazard Analysis, procedures for cold-water rescue and post-rescue care.
- c. Rescue response is intended for protection of project workers performing assigned duties—not as first responders to other agencies or to the public. However, if an overboard event occurs in the immediate vicinity of a project work site, where a non-project individual is in imminent danger of drowning, then the project safety boat and crew may respond, in the spirit of the State’s Good Samaritan laws. In keeping with project’s partnership with local law enforcement agencies, we will provide rescue efforts as practicable, when requested by the Sheriff’s office or similar agency.
- d. When the rescue boat responds to an overboard event, a crewmember shall notify the appropriate Control Room of the in-progress rescue. The Control Room Operator will call the entities listed below for continued care of the rescued worker.
 - Mid-Columbia Medical Center (541) 296 -1111
 - Klickitat Valley Hospital (509) 773 - 4022
 - Providence / Hood River Hospital (541) 386 – 3911
- d. **“WARNING”** During BRZ operations, if the rescue boat becomes unavailable, all work will cease.
- e. The Columbia River water temperature is below 70°F year-round. Worker rescue from the river becomes, therefore, a “cold-water rescue.” Project employees who become rescue crewmembers will be trained in, and will use, cold-water rescue and care techniques for all such events.

7. BOAT AND OPERATOR QUALIFICATIONS

RATIONALE

Project policy requires that personnel operating watercraft less than 26-feet in length shall be trained, tested and licensed in accordance with ER 385-1-91, 19.A.02, this document and other applicable regulations. Employees who operate watercraft will do so in a safe manner in accordance with recognized Federal, state and local laws and standards.

REQUIREMENTS

PERSONNEL (Reference EM 385-1-1, Section 19.A.02).

- a. Government operators shall be licensed or certified in accordance with ER 385-1-19.A.02. Officers and crew shall be qualified and documented by the designated project authority.
- b. Non-Government operators and crew shall be qualified as evidenced by a Boater Education Card or by letter from the employer with a current, valid USCG license.
- c. In accordance with new guidance from the Oregon State Marine Board:
 - By January 1, 2003, all individuals age 16 up to and including age 30 are required to possess a Boater Education Card to operate a motorboat having more than 10 horsepower.
 - By January 1, 2004, all individuals age 16 up to and including age 40 are required to possess a Boater Education Card to operate a motorboat having more than 10 horsepower.

Information on the requirements set forth by the Oregon State Marine Board can be found at the following website; <http://www.boatoregon.com/Education/index.html> .

VESSELS

- a. Under 26 feet. All vessels under 26 feet shall be inspected annually by a qualified person. The inspection shall be documented and a copy shall be furnished to the designated authority, upon request.
- b. 26 feet and over. All vessels 26 feet and over shall have current inspections and certificates issued by the USCG Auxiliary or licensed Marine Surveyor before being placed into service. The inspection shall be documented and a copy shall be furnished to the designated authority, upon request.

8. FALL PROTECTION

RATIONALE

There are several scenarios of dam work during which personnel may fall into the water. These different scenarios demand different methods of fall protection, and are covered by different regulations. Below are example scenarios, with appropriate references and the required precautions.

POSSIBLE SCENARIOS & REQUIRED SAFETY PRECAUTIONS:

*** Work from a work platform suspended by mobile crane:**

Requirements-- (ref. EM 385-1-1, Section 16.T.10&21.N; OSHA 1926.550(g)(3)(i)(F) 1926.106)

- (1) OSHA-compliant work platform
- (2) Inspected and load-tested mobile crane
- (3) PFD in place of PFA
- (4) Rescue boat immediately available
- (5) For swift current or turbulent water, reconfigure plant equipment to stop the flow. If the current cannot be substantially reduced, then alternative means of access must be utilized. *A live-boom-supported work platform may not be used in this circumstance.* (booms in which lowering is controlled by a brake without aid from other devices which slow the lowering speeds)

SPECIAL EXCEPTION: When a diver is to perform underwater work and will access the water with a work platform, then no lifesaving skiff is required. However, if the diver's tender or standby diver will remain in the work platform above water, then that condition will be considered work over water, and a lifesaving skiff (or rescue boat for BRZ work) will be required.

*** Work from a suspended scaffold, supported by a portable frame:**

Requirements--(ref. EM 385-1-1, Section 16.T & 21.N)

- (1) OSHA-compliant work platform
 - (2) Inspected and tested hoist/frame system, secured by locking wheels or anchored to deck
- (3) Fall arrest system
 - (4) For swift current or turbulent water, reconfigure plant equipment to stop the flow. If the current cannot be substantially reduced, then a second fall arrest system with retrieval capability shall be attached to each worker.

*** Work from the dam structure, or stationary, rigid frame (without guardrail or safety net):**

Requirements--(ref. EM 385-1-1, Sections 21.A. and 22.A)

- (1) Fall arrest system
- (2) A co-worker/observer, for emergency retrieval if needed
 - (3) a ring buoy with a minimum length of 90 ft.
 - (4) For swift current or turbulent water, reconfigure plant equipment to stop the flow. If the current cannot be substantially reduced use a second fall arrest system with built-in retrieval, in lieu of a lifesaving skiff (or rescue boat for BRZ work).

*** Work from the water surface (work boat, barge, etc.):**

Requirements—(ref.'s noted)

- (1) Within the Boat Restricted Zone: see Paragraph 5 above
- (2) Outside the Boat Restricted Zone: see EM 385-1-1, Section 19, "Floating Plant and Marine Activities".

*** Work near the water surface at the same elevation (i.e., shoreline):**

Requirements--(ref. EM 385-1-1, Section 5.J)

- (1) PFD
- (2) Communication with Control Room

- (3) Co-worker within clear sight.
- (4) Ring Buoy with rope (see rope requirements above)

SPECIAL EXCEPTIONS: (1) Walkway access onto a boat dock does not require PFD use; however, work on a dock will be treated as “work near the water surface.” (2) Where a dam deck has a guardrail on one side, and personnel can traverse the deck without approaching the unprotected edge, no PFD is required. However, if work will occur near the edge, or if an unprotected portion of travel exists, then a PFD is required.

JOHN DAY DAM – BOAT RESTRICTED ZONE

