

THE OLENTANGY RIVER WETLAND RESEARCH PARK

THE OHIO STATE UNIVERSITY

POLICIES AND PROCEDURES MANUAL

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GENERAL INFORMATION

Management Responsibilities

Responsibility for managing the Olentangy River Wetland Research Park (ORWRP) program and property falls under the jurisdiction of the College of Food Agriculture and Environmental Sciences through to its School of Natural Resources. The site, including research building, wetlands, and pavilion, is administered by the Director of the ORWRP.

All proposals and requests relating to the ORWRP educational and research programs or questions regarding the policies on the use of habitats, facilities, and equipment on the property should be made to the ORWRP Director. The Assistant Director coordinates the daily operation and scheduling of the ORWRP in consultation with the Director. The Director is responsible for integrating research and teaching activities with other University uses of the property and its facilities.

Access to Property

The ORWRP operates year-round. The property is accessible to the general public between dawn and dusk. A bike path and driveway offer access to the public, who are assumed to be at the site for recreational purposes. No other party is authorized to use the ORWRP facilities or equipment, or to gain road access to the site, without prior approval by the Director.

Keys for the building and site are assigned to researchers and other users and may not be duplicated and may not be given to others without specific authorization. All

keys must be surrendered immediately at the request of the Director or Assistant Director. Possession of a key to the site or building does not constitute implied permission to use the property unless specific authorization has also been given. There is a \$25.00 per key charge for replacement of lost keys for the Research Building and \$1 per key for the site key.

Natural Habitats

No environmental modifications may be made to property ecosystems without approval from the Director. This includes posting signs, use of flagging, introduction of organisms, removal, tagging, or marking of vertebrate animals, construction or introduction of apparatus, addition of nutrients or other chemical into habitats, deconstruction or removal terrestrial or aquatic vegetation, changing water levels, and altering runoff or drainage patterns. In addition, all approved signs, flagging, and apparatus must be removed from the habitat upon notification of the Director. Disturbance, feeding, taming, or other interference with wildlife on the property are not permitted without authorization from the Director.

Bringing pets and other vertebrates onto the property is discouraged and they must be leashed if brought onto the property. Under no circumstances are they allowed near or in the wetland basins or in the research building.

Written descriptions of all research conducted on the property must be filed with the Director. Individuals may not sample

any habitat without authorization from the Director or Assistant Director. In addition, access to certain habitats on the property may be prohibited or restricted during periods in order to avoid interference with other uses and users of the property. [See also **INFORMATION FOR RESEARCHERS AND PRINCIPAL INVESTIGATORS.**]

Vehicles and Driving

All state and University laws on the operation and use of motor vehicles apply to the ORWRP property, including those that prohibit driving while intoxicated. All visitor vehicles must remain on established roads and keep to the right of the road. Drivers are cautioned to remain aware of other vehicles in use on the property. Off-road driving is not permitted except with permission of the Director and that is restricted to teaching and research purposes.

Use of ORWRP vehicles requires a valid driver's license, approval by University as appropriate, and permission of the Director or Assistant Director of ORWRP. Anyone operating a University-owned vehicle must possess a valid driver's license and be an employee of The Ohio State University.

Site Entry

Access to the property and/or research building to vendors, consultants, delivery companies, and/or repair or service personnel not previously approved by the University is prohibited. Also, use of the site for any reason other than site seeing or personal enjoyment is not allowed unless previously approved. Site entry by non-university personnel, which is campus property, for construction, maintenance, or similar activity

requires an entry permission letter from OSU Legal Affairs.

Use of Vertebrates, Radioisotopes, and Chemicals

It is the responsibility of all individuals to read, understand, and rigidly abide by established University protocols for vertebrate, radioisotope, and laboratory chemical use. Individuals working in the research laboratories must participate in a university-approved safety training course at the beginning of their involvement with the program. Individuals using radioisotopes must maintain current logs of radioisotope use on a daily basis. Regulations governing laboratory behavior and the storage, handling, use, and disposal of laboratory chemicals are located in the section titled **CHEMICAL AND LABORATORY HYGIENE.**

Boat Use/Activity Near the River

Use of any ORWRP boats at the site or elsewhere must have the explicit approval of the Director for Assistant Director. Anyone operatin a boat must demonstrate familiarity with operating procedures and safety precautions.

The Olentangy River can be dangerous during high flow and at the low-lift dams located at the northwestern and southeastern corners of the site. Under no circumstances should anyone go into the river on or near the low-head dams. Those conducting work on or near the Olentangy River at the must show exteme caution and wear safety vests during high flow events, described as events where the ORWRP river staff gage reads greater than 15 feet.

CHEMICAL AND LABORATORY HYGIENE

Principal Investigators and other researchers are responsible for ensuring compliance with chemical hygiene and safety procedures. These include: (1) the procurement, use, storage, and disposal of chemicals used in the laboratory; (2) assurance that laboratory employees under their direction know and follow all chemical hygiene rules and procedures; and (3) submission to the Director of an annual inventory of the hazardous materials used in the laboratory or operations on the property. All individuals working in or entering ORWRP laboratories are responsible for conducting themselves and their operations in accordance with the proper chemical hygiene procedures as required by the University.

Behavior in the Laboratory

Individuals working in or entering the ORWRP laboratories (including visitors) must conduct themselves in a professional manner at all times. Horseplay and practical jokes are expressly forbidden. Individuals should never work alone when conducting a potentially hazardous activity and must be aware of the location and proper operation of laboratory safety equipment. Unattended laboratory experiments must be set up in a manner that ensures that hazardous substances will be safely contained in the event of a power or equipment failure.

Visitors to the ORWRP laboratories must observe all safety regulations. Unattended children are not permitted in the ORWRP laboratories. In addition, children are not permitted in areas where radioactive isotopes or hazardous chemicals are stored or used.

Disabling or Removal of Safety Equipment

The disablement, removal, and/or frivolous use of safety and first aid equipment and supplies are prohibited. These include fire extinguishers, eye washes, and first aid kits. Missing or malfunctioning safety equipment and/or missing or consumed safety or first aid supplies must be reported promptly to the Director or Assistant Director.

Avoidance of Routine Exposure

Skin contact with potentially hazardous chemicals must be avoided at all times. Individuals should never smell or taste chemicals, and pipetting by mouth is prohibited. Apparatus that might discharge chemical vapors or dusts must be vented into a hood or to the outside of the building. Only chemicals that can be used safely in the ORWRP laboratories may be used by researchers. Individuals should never underestimate risks and should remain aware that chemical reactions involving two or more substances can form reaction products that are significantly more toxic than the initial reagents. In addition, individuals should always assume that substances of an unknown toxicity are toxic.

Professional Habits in the Laboratory

Eating, drinking, chewing gum, smoking, and application of cosmetics are not permitted in laboratories. Food must not be stored in a refrigerator with chemicals nor be prepared or served in glassware or utensils

that are used in laboratory operations. Hands should be washed before using the restroom; eating, drinking, applying any cosmetics, lotions, or insect repellents; and before leaving the laboratory area. Long hair and loose clothing must be confined.

Individuals entering or working in laboratories must wear shirts, long pants, and shoes. Persons wearing skimpy clothing such as bathing suits, halter tops, or shorts are not permitted in the laboratory areas unless they are wearing a protective lab coat. Wearing of foot thongs and sandals is not permitted in laboratory areas. Wearing of canvas shoes is not permitted when caustic, corrosive, flammable, toxic, or radioactive substances are being used. Individuals should remain alert to unsafe conditions and report and/or correct such conditions when detected.

Lifting Heavy Objects

Individuals are cautioned to always get help when handling objects that are too heavy or too bulky for one person. Heavy objects should be lifted by bending at the knees using leg muscles, not back muscles. Heavy objects should be held close to the body.

Housekeeping

Lab areas (bench tops, hoods, etc.) are to be kept sufficiently clean and uncluttered to minimize the risk of spillage, breakage, personal injury, and unnecessary contact with chemicals. Any spills or accumulations of chemicals on work surfaces or floors must be removed as soon as possible with techniques that minimize residual surface contamination. Floors and walkways must remain dry at all times. Walkways, exits, access to emergency equipment, and access to utility controls must not be blocked.

Personal Protection

Individuals working in or entering the laboratories (including visitors) must be informed of the location and proper use of protective equipment available in the laboratories. Individuals must wear appropriate protection, including gloves, lab coats, and safety glasses, when they are in the laboratories. Contact lenses should not be worn in the laboratory unless absolutely necessary. Vapors and chemicals can get trapped under lenses, making it difficult or impossible to remove lenses in order to properly rinse the eye. This can result in severe eye damage. If wearing contact lenses is absolutely necessary, the Assistant Director and other persons working in the laboratory at the time must be informed so that special precautions can be taken in the event of an accident.

Glassware

All glassware must be inspected for defects and cracks. Weak glass can cause severe accidents by leaking hazardous chemicals, cutting individuals, or imploding under vacuum. A lubricant must always be used when inserting glass tubing or thermometers into rubber stoppers. All cut glass tubing and rods must be fire polished. Vacuum filtrations and distillations must use implosion-resistant glassware designed for this purpose. Broken glass should be promptly swept up and disposed of in containers marked "GLASS."

Instrument Use

Individuals should never attempt to operate a machine or instrument without proper instruction in its use. The area around instruments must be kept clear of obstructing materials. All belt-driven equipment

(vacuums, air pumps, etc.) must have a guard to prevent hands and/or clothing from being pulled between the belt and pulley. Equipment with damage or frayed electrical cords should not be used. Such damage should be reported immediately to the Director or Assistant Director.

Oil and boiling water baths, muffle furnaces, drying ovens, and similar devices should never be left unattended. Precaution should be taken to contain any hot oil or water spills.

Chemical Procurement, Distribution, and Storage

All OSHA Standard Specific Chemicals must have the approval of the OSU Office of Environmental Health and Safety and the ORWRP Director. A material safety data sheet (MSDS) is required for all hazardous chemicals. All containers must be adequately labeled with the following information as a minimum: substance name, appropriate hazard warnings, precautionary measures to be observed when storing and using the substances, owner's name, date the substance was received, and date the container was opened. Chemical containers may not be brought to or stored at the ORWRP without an adequate identifying label. Bulk quantity chemicals that are subdivided must be placed in containers that are labeled with the same information. Unneeded items must be removed from the ORWRP or disposed of properly. When potentially hazardous chemicals are hand-carried, the container should be placed in a second container to protect from breakage and spillage.

Each Principal Investigator must provide the Director or Assistant Director with an inventory of all chemicals used at the

ORWRP when they are used in order to make this information available to The Ohio State University Office of Environmental Health and Safety.

Stored and working amounts of hazardous chemicals must be as small as practically possible. Long-term storage of bulk chemicals requires approval from the Director. Chemical reagents must remain in closed containers when not in use. Flammable chemicals must be stored in a flammable materials cabinet or in the flammable storage area. Incompatible chemicals should be segregated. Compressed gas cylinders must be secured at all times, and safety caps should be in place when the cylinder is not in use.

Waste Storage and Disposal

Individuals working in the laboratories are responsible for properly disposing of all wastes associated with their work. Broken glass and radioactive or chemical waste must be properly labeled and disposed of by procedures that avoid injury or contamination of the work area and property habitats. Procedures must conform to OSHA, EPA, state, and NRC regulations. All radioactive and potentially hazardous chemical waste must be stored in areas that are inaccessible to unsupervised non-laboratory personnel.

Accidents, Hazards, and Injuries

All accidents resulting in injury, damage, or potential chemical or radioactive contamination must be reported immediately to other individuals in the laboratory area who might benefit from this information and to police or appropriate health officials. Accidents must then be reported promptly to the Director or Assistant Director. Employee

are required to fully complete their section of the OSU Employee Accident Report and to seek medical treatment if necessary.

Unsafe laboratory conditions and/or practices by laboratory personnel or visitors must be similarly reported whether or not they result in injury or contamination. Emergency instructions and telephone numbers for fire and accidents are posted by the telephones in the research laboratories.

Chemical spills must be cleaned up by spreading the contents of an appropriate spill control kit on the spill. Once the chemical is absorbed, the material must be scooped up and deposited in a plastic disposal bag. The contaminated surface must then be wiped up with soap, water, and a sponge. This must be added to the disposal bag contents as well. The disposal bag must then be tied and labeled. Notify the Assistant Director for appropriate disposal procedure or pickup. If there is any doubt regarding proper spill cleanup procedure, contact the Assistant Director or The Ohio State University Office of Environmental Health and Safety.

For spills involving radioactive materials, consult the RADIATION EMERGENCY PROCEDURES located in the laboratories. Immediate notification of a Radiation Safety Officer is required. If the Radiation Safety Officer is unavailable, the Office of

Environmental Health and Safety should be notified. If there is no answer, The Ohio State University Police should be notified. The Ohio State University Police will then contact a member of the Office of Environmental Health and Safety representative to notify that office of the situation.

Bulk Chemical Storage

Only working amounts of chemicals may be stored in laboratories unless advanced approval is given by the Director. Chemicals in containers 5 gallons or larger which are unlikely to be used within a two-week period are considered "bulk" and must be stored in the designated area, divided into the following components: acids, bases, solvents, gas, and alcohol. Containers must be stored in the appropriate area. Each container must be adequately labeled with the following information: substance name, appropriate hazard warnings, precautionary measures to be observed when storing and using the substance, owner's name, date the substance was received, and, if opened, the date the container was opened. Chemical containers may not be brought to or stored at ORWRP without an adequate identifying label. A charge of \$50.00 per container will be assessed to a Principal Investigator to cover the cost of the assay.

INFORMATION FOR RESEARCHERS AND PRINCIPAL INVESTIGATORS

The ORWRP invites scientific investigators from academic institutions and government agencies to take advantage of the opportunity to conduct research in this unique setting. In the administration of research, the major objective is to maintain the value and uniqueness of the habitats on the property as well as to coordinate activities between researchers and research projects in order to avoid conflicts over the use of facilities and habitats.

Proposals for ORWRP Research

To initiate a research project, write, call, or e-mail the Director to describe the project briefly. A short written pre-proposal may be submitted but is not required. If the project is deemed feasible within the resources and facilities available, a formal proposal should then be submitted. The formal proposal should consist of two parts: (1) the full proposal describing the proposed project in sufficient detail that it can be reviewed on its merit; and (2) a cover letter outlining projected facilities needs.

A copy of a grant proposal being developed for submission to a foundation or government agency in late draft" can serve as "part 1." Proposals should be complete in their description of research activities proposed on ORWRP property and in laboratories.

The cover letter should give the approximate dates of likely visits to the property. It should also include an estimate of the names and approximate number of senior investigators, students, and technicians

who will use the property. The letter should also include an explicit statement of the foreseeable beneficial or adverse long- and short-term impacts on each habitat on the property as a result of the research activities.

Review Process

Proposals involving only nondestructive sampling, posing no threat to property habitats, and capable of being accommodated within the facilities available may be approved by the Director without further review. Projects involving removal or manipulation of vertebrate animals, biological or chemical manipulation of habitats, or large or obstructive field apparatus may be reviewed by others. The Director may also request comments by colleagues as necessary. Proposals for projects that will set up extensive field apparatus, involve manipulations of habitats that have previously served as controls (i.e., have not been previously manipulated), and might have long-term impacts on the habitats to be investigated will be reviewed by members of the Ohio Center for Wetland and River Restoration (OCWRR) committee.

Projects that involve the use of fish or other vertebrates must include a statement of the protocols that will be followed for the collection, care, and research use of these animals and must include appropriate university approval. Proposals that include the use of radioactive materials or hazardous chemicals, either as laboratory reagents or for direct addition to area habitats, must be reviewed by OSU Environmental Health and Safety Office. It is also the Director's responsibility as to whether radioactive

materials or hazardous materials can be used at the ORWRP, even if such use is approved by the Environmental Health and Safety Office.

A more involved project will require a longer review process. However, the Director will attempt to provide a written response to a proposal within three weeks of the date it is received. A positive response will be in the form of a letter to the Principal Investigator for inclusion in the proposal for funding to a public or private granting agency.

Obligations of Researchers

Researchers must abide by the protocols described in the proposal submitted to the Director for review, by any conditions or stipulations imposed as a result of the review process, and by the regulations included in this document. It is the responsibility of each Principal Investigator to secure all applicable state or federal scientific collecting permits and to abide by the laws and regulations that apply to his or her research activities. Research operations are subject to ongoing review by the Director. Changes in environmental laws, government permit requirements, or health regulations may require procedural modifications by researchers. Investigators must leave habitats and laboratory areas free of apparatus, equipment, markers, etc., at the conclusion of a research project. Failure to do so will result in the assessment of cleanup and disposal charges and may affect future access to the property. Longer-term storage of vehicles, equipment, apparatus, supplies, chemicals, or other materials requires permission of the Director or Assistant Director.

Researchers are expected to provide their own tools, equipment, and supplies for investigations conducted on the ORWRP

property. Space in the laboratories is at a premium and is assigned by the Director to the Principal Investigators as available. Sharing of space in the laboratories among several different Principal Investigators may be necessary.

Principal Investigators ultimately are responsible for individuals involved in their research projects. This includes all students, technicians, employees, and/or other individuals involved in their project or who are on the property because of their project. Exemption from this responsibility requires written approval from the Director.

Publication Requirements

Principal Investigators and all other researchers at the ORWRP are required to submit a manuscript on their research results (hard copy and electronic) at the end of each calendar year for that year's ORWRP annual report.

One copy of all raw data collected from the ORWRP property must be deposited with the Director the end of active research. Data may be deposited in printed form or in one of several computer-compatible formats. Upon written request from the Principal Investigator, the Director may (if legally permitted) withhold public access to these data for at least five years beyond the end of active research.

All publications resulting from research conducted on the ORWRP property are considered scientific contributions from the ORWRP. Therefore, all publications must include the following or an equivalent acknowledgement: "This paper is a contribution of the Olentangy River Wetland Research Park at The Ohio State University, Publication Number xx-xxx" Reprint

numbers will be assigned to the paper as soon as it is accepted and the year of publication known. This is usually when proofs are being reviewed.

Ten copies of reprints and two copies of all other publications, including bound honors theses, Master's theses and Ph.D. dissertations resulting from research conducted at the ORWRP, should be submitted to the ORWRP Director. One copy of each publication will be maintained in the Wetland Library (Room 130).

SCHEDULE OF CHARGES AND FEES

Fees and overhead recovery are necessary to help defray maintenance costs of the wetland property, the teaching and research infrastructure, and the research building.

Charges and fees for using the ORWRP property and facilities fall into four categories: 1) fees agreed on as part of overhead recovery that should be included in all research contract and grants using the ORWRP or its facilities; 2) annual fees charged to academic units or consortia members for general use of the facilities for teaching and unfounded research; 3) specific fees for specific field and laboratory use of the site, and 4) incidental fees. Rates are subject to change.

Research Contracts and Grants

Principal Investigators should work with the ORWRP Director if they are planning a grant or contract that uses the ORWRP or its laboratories. For OSU research, a minimum of 30% of a grant/contract overhead should be listed with the ORWRP Director as co-PI on OSURF proposal submittal paperwork (PA-005). Principal investigators are also advised to budget fees for specific costs, e.g. mesocosm repair/construction, copying, phones, etc. with a minimum of 5% annual increase in recoverable fees to cover future fee increases.

Safety and consideration of other research at the site that may conflict with proposed research. Therefore any Principal Investigator considering a research grant or

contract involving the use of the ORWRP must obtain written permission to use the site from the ORWRP Director. Limitations, if any, will be described in the reply. [See also **INFORMATION FOR RESEARCHERS AND PRINCIPAL INVESTIGATORS**].

Annual Fees

A general membership fee is charged annually to any “higher education unit” making use of the ORWRP. Such a fee applies to institutional members of the Ohio Center for Wetland and River Restoration (OCWRR) and similar groups. Substantial use is defined as more than one course using the facility or a minimum of one or more “unfunded” research projects, e.g. undergraduate honors research. Payment will be on a fiscal year basis. Fiscal year will be that of Ohio State University which currently is July 1 to June 30. For purposes of this fee, a “higher education unit” is described as:

- a) a College or School within The Ohio State University
- b) a university or college other than Ohio State University

Fees will be proposed by the ORWRP Director, in consultation with faculty user group(s), and will be approved by appropriate university procedures. Current fees are:

College or School within The Ohio State

University (Columbus campus): **\$2,000/yr**

A College or University that is a member of the Ohio Center for Wetland and River Restoration: **\$1,000/yr**

Annual fees for colleges, universities, and other appropriate institutions that are not part of The Ohio State University or members of the Ohio Center for Wetland and River Restoration: **\$2,000/yr**

Field and Laboratory Fees

Field and laboratory fees are waived for any faculty, staff, or student whose higher education unit has paid the annual fee described above [see **Annual Fees** section above].

A field and laboratory fee is charged for all individuals who use the ORWRP property and facilities for teaching or unfunded or funded research. Unfunded research is defined as research that does not have a specific OSURF, OARDC, or Engineering Experiment Station project number. For funded project requirements, see **Research Contracts and Grants**, above.

For university classes or unfunded research that use ORWRP office, laboratory facilities or habitats, the fee is **\$100 per seven days** or **\$400 per month for each participant**. The seven-day rate is the minimum charge. Projects that use any field apparatus are charged and additional **\$50 per seven days for use**. Projects that require dedicated laboratory are charged a minimum use fee ranging from **\$100 to \$200 per week** depending on the size and location of the laboratory.

Mecosocm-use fees for experiments are **\$1000 per year per set of 20 mesocoms**.

Facilities fees are subject to negotiation with the Director and may be waived by the Director for Consortium members or for short visits by new investigators who wish to inspect the property and facilities for the purpose of developing future collaborative grant proposals.

Incidental Fees

Incidental fees include long-distance telephone and fax charges, waste disposal, and cleanup; repair costs for damages or unauthorized modification; use of site engineer's time for construction or improvement of facilities; or use of site data. Researchers are expected to properly remove and/or dispose of all apparatus, equipment, markers, and chemical or radioactive wastes used on the property. The full cost of disposal and analysis for identification of unidentified chemical wastes will be billed to the Principal Investigator for all potentially hazardous chemical and/or other wastes that remain on the property beyond the research project.

Direct long-distance calls are permitted only by authorized individuals and must be reported to the ORWRP. All calls should normally be billed to the Principal Investigator. Individuals without assigned laboratory space may use the phone provided; all long-distance calls should be made collect or be charged to an appropriate telephone account.

Special Fee Schedule:

- Conference Room Use \$300/event
- Lobby Use for Event \$250/event
- Office space rental \$2,000/yr
\$1,200 for six months

- Long-distance calls actual cost
 - Copies \$0.20/page
 - Fax \$0.50/page
 + call cost
 - ORWRP vehicle use \$0.40/mile
 - Non-hazardous research
 waste \$0.05/lb
 - Chemical and hazardous
 waste disposal actual cost
 (plus additional university charges
 if substance must be identified)
 - Storage of material in
 sheds, garages or site: \$50/mo
- Site data use: price negotiable, depending on extent of data supplied and whether project is funded research project. Under no circumstances can site data be used for publications or grant applications without the permission/collaboration of the ORWRP Director. [Also see **INFORMATION FOR RESEARCHERS AND PRINCIPAL INVESTIGATORS** above].