

# Strategic Plan

## A Vision for our Future

As we enter the fourth decade of the Olentangy River Wetland Research Park (ORWRP), we are committing ourselves to a mission centered on the stewardship of the natural resources we manage over the coming decade. We aim to engage in extensive ecosystem restoration and to weave these efforts into our core mission areas of research, education, and outreach. While activities within these mission areas will focus on restoration efforts, we also seek to increase the interplay between each area. We wish to not only engage in environmental outreach but to research the effectiveness of different approaches and educate the next generation of practitioners. We seek to maximize Ohio State student participation in our research mission through utilizing our living laboratory in their classes, our internships, and independent research, ultimately maximizing our research output and their practical experience. Through these efforts we will become a nexus for knowledge and conservation of wetlands and associated habitats, and a model for the stewardship of urban ecosystems.



## OUR MISSION

To advance knowledge of wetlands, riparian areas, and other native habitats through research, outreach, and education integrated with the stewardship of our natural resources.

**The Wilma H. Schiermeier Olentangy River Wetland  
Research Park**  
[u.osu.edu/orwrpramsar](http://u.osu.edu/orwrpramsar)



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For an accessible format of this publication, visit [cfaes.osu.edu/accessibility](http://cfaes.osu.edu/accessibility).

**STEWARDSHIP**

**Vision**

Restore and sustain the ecological integrity of the ORWRP's natural resources in collaboration with our students, faculty, and broader community.

**Goal 1**

Transform the biotic community at the ORWRP through ecological restoration.

**Goal 2**

Sustain gains made through restoration efforts.

**Goal 3**

Transform the Heffner Research and Education Building into a model for increasing sustainability in existing buildings.



**RESEARCH**

**Vision**

Produce research that impacts the restoration, conservation, and awareness of wetlands and associated habitats from our city to around the globe.

**Goal 1**

Initiate a new long-term "in-house" research project.

**Goal 2**

Broaden the scope of affiliated projects.

**Goal 3**

Produce in-house research products with national and international impact.

**Goal 4**

Produce research products that inform restoration of natural areas in urban settings.

**OUTREACH**

**Vision**

Become a premier urban wetland ecosystem outreach and education center.

**Goal 1**

Increase the number and breadth of outreach audiences.

**Goal 2**

Update and modernize passive outreach signage.

**Goal 3**

Increase our outreach capacity by improving infrastructure.



**EDUCATION**

**Vision**

Be a state-of-the-art learning facility and a living classroom where students can gain world class knowledge and practical experience in environmental research, outreach, and stewardship.

**Goal 1**

Integrate students into all areas of our mission.

**Goal 2**

Provide an enriching learning environment to students.

# STEWARDSHIP

## Vision

**Restore and sustain the ecological integrity of the ORWRP's natural resources in collaboration with our students, faculty, and broader community.**

Since water was first introduced to the ORWRP in 1994, an enormous amount of change has occurred to the biotic community. This has included the ecological succession and establishment of native wetland and riparian plant species and associated animals. However, this has also included the establishment of several over-dominant exotic invasive species, such as common reed (*Phragmites australis*), bush honeysuckle (*Lonicera maackii*), and callery pear (*Pyrus calleryana*). With the initial long-term studies on wetland vegetation succession initiated by Dr. William Mitsch having concluded, we believe the mission areas of the ORWRP are best served by transforming the vegetative community from one dominated by exotic invasives to one more reflective of a native ecosystem. In this way, the ORWRP can become a hub for knowledge on managing healthy wetland ecosystems, particularly in an urban landscape. Such a transformation will create opportunities for educating our students in the practice of ecological restoration and associated research, bringing a valuable conservation message and best management practices to the broader public, and researching the responses of aquatic and terrestrial plants and animals to restoration.

## Goal 1

**Transform the biotic community at the ORWRP through ecological restoration.**

Objectives:

- Remove invasive exotic species that have deteriorated the ecological integrity of the ORWRP.
- Restore native plants to all cover types at the ORWRP.



## Goal 2

**Sustain gains made through restoration efforts.**

Objectives:

- Develop and implement a management plan to maintain native ecosystems within the ORWRP.
- Determine the material and personnel costs per acre of maintaining restoration gains long-term.



## Goal 3

**Transform the Heffner Research and Education Building into a model for increasing sustainability in existing buildings.**

Objectives:

- Make sustainability upgrades to the Heffner Research and Education Building that reduce water and electricity usage and impacts on the surrounding environment.
- Add sustainability messaging in and around the building.



# RESEARCH

## Vision

**Produce research that impacts the restoration, conservation, and awareness of wetlands and associated habitats from our city to around the globe.**

Following the creation of the two experimental “kidney” wetlands at the ORWRP, Dr. William Mitsch initiated a 20-year study of plant community succession with one of the wetlands being planted with native wetland species, and one left un-planted. This study was completed, with the primary conclusions being that planting did not impact the ultimate plant community in the wetlands, with both treatments eventually being dominated by cattail (*Typha spp.*) and only the disturbance activities of muskrat (*Ondatra zibethicus*) providing structural variation. Since the conclusion of this study, while many short-term research projects have occurred, long-term research led by the facility has ebbed. While the small area limits spatial replication of ecological research, the greatest opportunity for impactful research at the ORWRP is in projects with long-term goals, leveraging the fact that the facility will exist in perpetuity. Therefore, we believe the greatest opportunity for ORWRP-led research is designing projects around the ecological restoration of the site and the ecosystem responses. In addition, we wish to see the research output of the facility increase overall by growing the community of researchers associating with the ORWRP, and growing capacity to host their research projects.

## Goal 1

**Initiate a new long-term “in-house” research project.**

Objectives:

- Establish long-term monitoring of biotic community prior to, during, and following ecological restoration.
- Establish long-term monitoring of abiotic environment prior to, during, and following ecological restoration.
- Establish a new long term experimental wetland ecology study in the “kidney” wetlands.

## Goal 2

**Broaden the scope of affiliated projects.**

Objectives:

- Consistently attract and support projects from outside the ORWRP that increase our impact on scientific knowledge.
- Work through student organizations to support student research projects from across campus.

## Goal 3

**Produce in-house research products with national and international impact.**

Objectives:

- Acquire 10 years of project data from long-term study (2 years baseline, 8 years during/post restoration).
- Utilize long term data to publish both applied and theoretical papers in top-tier peer-reviewed journals.

## Goal 4

**Produce research products that inform restoration of natural areas in urban settings.**

Objectives:

- Publish findings of the long-term study for general public, and white sheets of best management practices for ecological restoration in an urban setting.
- Disseminate findings through public outreach, Ohio State Extension, and workshops at the ORWRP.



# OUTREACH

## Vision

**Become a premier urban wetland ecosystem outreach and education center.**

The ORWRP is an extremely unique site, being a wetland complex situated in the largest city in Ohio, on the campus of one of the 5 largest universities in the U.S., and adjacent to the busiest stretch of multiuse greenway trail in the county. Thus, the ORWRP should be a nexus for the public to experience and learn about wetlands and associated habitats through our foundations in wetland conservation and research, our ability to connect to the community through resources like Ohio State Extension, the expertise of our affiliated faculty, and our connections to the broader community of environmental professionals. We should be providing engagement opportunities for all audiences, ranging from dynamic signage to highly interactive in-person programming. Further, as much as possible our Ohio State students should be involved in developing and delivering outreach, such that they can gain the practical experience as well as research experience and learn about the theory behind effective environmental outreach. Through these efforts we can not only communicate our own efforts, but broaden our impact on the conservation and stewardship of wetlands.

## Goal 1

**Increase the number and breadth of outreach audiences.**

Objectives:

- Develop a menu of outreach offerings that are catered to a variety of audiences.
- Positive trends in the participation of various groups by type (e.g., K-12, NGOs, and universities).



## Goal 2

**Update and modernize passive outreach signage.**

Objectives:

- Assess current docent signs for condition and relevance and develop a comprehensive plan for new signage with interactive features allowing for dynamic messaging (e.g., QR codes linked to videos, informational webpages).
- Work with researchers to develop informational sheets describing ongoing research (especially highly visible projects), which can be displayed on-site (e.g., in message centers).



## Goal 3

**Increase our outreach capacity by improving infrastructure.**

Objectives:

- Design and construct a bus turnaround and increased parking.
- Increase ORWRP visibility by installing signage on Olentangy trail.
- Renovate the Sandefur Pavilion into the Sandefur ORWRP Outdoor Education Center, a sheltered teaching and outreach space opening up onto the Wetlands.



# EDUCATION

## Vision

Be a state-of-the-art learning facility and a living classroom where students can gain world-class knowledge and practical experience in environmental research, outreach, and stewardship.

The ORWRP has seen enormous successes in both undergraduate and graduate education at Ohio State over more than 30 years of its existence, thanks to the commitment of faculty and instructors to utilizing its resources as a “living laboratory”. Currently over 700 students take courses at the ORWRP, ranging from Wetland Ecology to Environmental Education and Outreach to Wildlife and Aquatic Field Methods. These courses leverage the proximity of the Heffner Research and Education Building to the living environment outside to provide a unique learning experience that emphasizes the integration of hands-on practical experience in the field with theoretical and analytical knowledge gained in the classroom and lab. However, despite these successes, there are limitations to the education capacity at the ORWRP that we can improve upon. Furthermore, the initiation of a long-term ecological restoration study and the reinvigoration of our outreach mission will provide enormous opportunities to involve students in research and environmental outreach that can enrich their experience both inside and outside of class.

## Goal 1

Integrate students into all areas of our mission.

Objectives:

- Hire site management, outreach, and research interns annually.
- Make our long-term and monitoring data available to classes.
- Engage and partner with student organizations.



## Goal 2

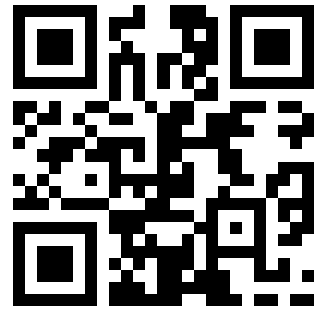
Provide an enriching learning environment to students.

Objectives:

- Ensure existing spaces and resources inside and outside are safe and conducive to learning.
- Increase utilization of Prairie Conference Room for teaching.
- Renovation of analytical and teaching labs into modern single lab with greater capacity for classes and research applications.

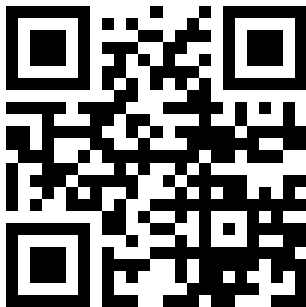


# SUPPORT OUR FUTURE



**Schiermeier Olentangy Wetlands  
Research Park**  
(315475)  
[give.osu.edu/SupportWetlands](https://give.osu.edu/SupportWetlands)

This fund supports ORWRP's activities in all of our mission areas of stewardship, research, outreach, and education.



**Heffner Family Wetland Fund**  
(643066)  
[give.osu.edu/WetlandsStudents](https://give.osu.edu/WetlandsStudents)

This fund directly supports ORWRP's student internship program.



# ORWRP Site Map

