# Jackson Bottom Wetlands Preserve



Annual Report • 1995/96

Located along the Tualatin River in the Tualatin Basin, the floodplain spreads to form JACKSON BOTTOM, a wetlands preserve which inspires an interesting mix of partners - ecologists, educators, planners, researchers, economists and water quality managers. The 650 acres of protected wetlands, situated in a much larger floodplain, continue to be transformed through the unique cooperation between local jurisdictions, agencies, organizations and individuals. Dedicated to open space and wildlife habitat values, water quality research and management, educational experiences for all levels of learners, and passive recreation, the JACKSON BOTTOM WETLANDS PRESERVE is a local, regional and national resource.

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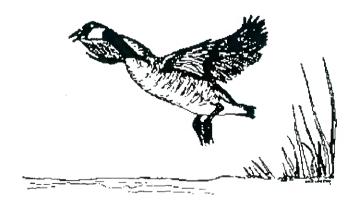
# The Goals of Jackson Bottom Wetlands Preserve



### A Project Integrating Wildlife Enhancement, Research, Water Quality Management, Education and Passive Recreation.

In 1989 the Jackson Bottom Concept Master Plan was completed, and thus started the "formal" phase of fulfilling the goals worked out by the managing body for the project, the Jackson Bottom Steering Committee. As stated in that plan, the following benefits of the project are described.

- Permanent preservation of open space and agricultural land.
- Expanded wildlife populations.
- Expanded recreational opportunities.
- Expanded educational opportunities.
- Lower capital and operational costs to meet water quality standards.
- Species diversification and increased wildlife populations providing year-round habitat
  for native species along the Pacific flyway through creation and restoration of wetland and
  upland habitats.
- 2. Water quality management through investigations using the Jackson Bottom Experimental Wetlands, research efforts have focused on the use of constructed wetlands to "polish" wastewater from sewage treatment plants. These efforts have been providing information about many aspects of constructed wetlands, including possible groundwater influence, the importance of soil characteristics related to water quality, groundwater recharge, vegetation/soil patterns and their usefulness for nutrient removal, wildlife use, and educational opportunities.
- 3. Public participation passive recreational activities provide birdwatching, botanizing, wildlife viewing, photography, art experiences and hiking. Tours for agencies, organizations and local community groups interested in wetland issues are enriched by the benefits derived from enjoying the aesthetics of a large open space close to a busy urban center. Educational opportunities abound for all ages, ranging from primary to university age levels using the Bottom as an ecological laboratory.



#### Additional objectives of the project are being fulfilled:



- Public access to the Tualatin River both visual and physical.
- Streamflow maintenance.
- Groundwater recharge.
- Wetlands and open space preservation.
- Continued utilization of wetlands for tertiary wastewater treatment.
- Wetlands for wildlife and habitat enhancement.
- Public and education programs serving as a model to be utilized nationwide.



# The Concept Master Plan A Unique Partnership Which Works

The Jackson Bottom Steering Committee, (see first page), is the primary body chosen to administer the Plan. The Wetlands Coordinator, hired by the City of Hillsboro, with joint funding from the Unified Sewerage Agency, facilitates implementation of the Plan. Local citizen involvement, as well as environmental agencies and groups such as Oregon Dept. of Fish & Wildlife, U.S. Fish & Wildlife Service, Environmental Protection Agency, Division of State Lands, Metro Greenspaces, Portland Audubon Society, Ducks Unlimited, Bureau of Environmental Services of Portland, Washington Co. ESD, Oregon Graduate Institute and The Wetlands Conservancy provide expertise, guidance, and funding to move the Plan forward. The unique partnerships represented by the Steering Committee and other participating entities serve as a model for those interested in wetland enhancement, restoration, research and education.

# A Message from the Wetlands Coordinator 1995/96



The goals of Jackson Bottom Wetlands Preserve are continuing to be met because of the overwhelming positive support from volunteers, the community and local resource agencies. An early morning trip to the Bottom, any time of year, will reward the visitor with exciting wildlife viewing opportunities - the increased diversity and habitat values created by the restoration and enhancement projects of the past years mark these enriched environments. With support from agencies such as Oregon Department of Fish & Wildlife, Unified Sewerage Agency, the Hillsboro Chamber of Commerce and the City of Hillsboro, the "vision" of Jackson Bottom is being realized everyday.

Jackson Bottom is a wetland education resource for the entire region. With continuing financial support from granting organizations, the City of Hillsboro and Unified Sewerage Agency, we have been able to take on additional staff. Susan Cross and Jan Curry, both Wetland Education Specialists at Jackson Bottom bring over 40 years of experience and knowledge to programs at The Preserve. Both Susan and Jan are certified teachers with background and experience designing creative and innovative education and exhibit programs for citizens of all ages. Susan, along with her varied duties at Jackson Bottom, is the project coordinator of a grant funded watershed wide student involvement program that links schools with natural resource projects. Jan coordinates three Jackson Bottom projects; the Outreach Traveling programs which travel to schools and community centers, field programs for large groups visiting The Preserve and our strong volunteer staff. I feel very fortunate to be surrounded by staff, volunteers, a Steering Committee and a community who care and are committed to the "vision" of Jackson Bottom.

Public participation at Jackson Bottom takes many forms. Those directly involved working on site, such as the Friends of Jackson Bottom, the Cascade Education Corps, school, church, scout and interested citizens have helped create public access while enjoying the benefits of their work. The trail system, interpretive signs and wildlife viewing blinds are an example of what dedicated volunteers can do.

The goals and objectives in the Jackson Bottom Concept Master Plan will continue to be met as the future unfolds. The future will bring continued wildlife enhancement projects, water quality studies, locally and regionally supported research projects, education and passive recreation opportunities. I look forward to every day; the changes, the enthusiasm, the dreams fulfilled at Jackson Bottom Wetlands Preserve.

Jackson Bottom Wetlands Coordinator

## Accomplishments in Review-1995/96



People, wildlife and the environment have benefited from the achievements at Jackson Bottom. Wetland enhancement projects have been built, vegetation planted, trails constructed and education programs expanded.

These are just some of the accomplishments of 1995/96.

Interpretive Center/Water Quality Lab: Construction of Unified Sewerage Agency Water Quality lab was completed in the spring of 1996. The fund raising program to build the Interpretive Center got underway using the planning efforts of the lab design workshops. Portland General Electric donated \$2,500 to kick off the capital campaign. Tom Wilson, a local area fund raising consultant, began working with the Steering Committee to design a fund raising plan for the Phase One campaign, a goal of \$750,000. In the near future, a new and innovative access to The Preserve will unfold.

Wet Prairie Restoration Project: Through funding from Metro Greenspaces and the U.S. Fish and Wildlife Service, a four acre section of The Preserve is under the watchfull eye of wetland researchers, planners and ecologists. A progressive research project was implemented to restore a portion of Jackson Bottom to a Deschampsia wet meadow habitat. With the controlled use of herbicides, plowing and fire, methods to control or eliminate reed canary grass are being tested. This four year project, while not only benefiting a segment of the Bottom, has involved researchers and students from Pacific University, U.S Fish and Wildlife Service, U.S. Environmental Protection Agency and Oregon Graduate Institute. Working with local researchers, volunteers will be trained to collect field data through the coming years.

Wildlife Snags, Bird and Bat Boxes: This on-going project is a favorite of scout groups, schools and volunteers interested in enhancing wildlife populations in The Preserve. Over 300 song bird and bat boxes were built and installed in the past two years. Through a partnership with the Washington County Education Service District, Jackson Bottom became the location for over 1,500 school students to participate in a wildlife enhancement project.



Tualatin Watershed Involvement Program: A grant from the Governor's Watershed Enhancement Board (GWEB) has continued to bring Jackson Bottom Wetlands
Preserve into the classroom and community. Six schools in the Tualatin River Watershed have piloted an innovative approach to student/citizenship involvement. This approach to student involvement in the schools is one of GWEB's priority programs with the hope of expansion in other parts of the state and region. Jackson Bottom staff produced a 44 page publication, "Watersheds, Wetlands, Forests, Streams: Learning Opportunities Next Door-Linking Schools with Natural Resource Areas". This manual has received outstanding reviews from throughout the northwest.

Tualatin Basin Water Quality Traveling Programs From a grant from the Tualatin Valley Water Quality Endowment Fund/Oregon Community Foundation, Jackson Bottom Staff have developed a series of five traveling/outreach programs for schools and groups throughout the Basin. Jackson Bottom Staff travel to classrooms presenting hands-on science labs and demonstrations which focus on water quality, wetlands and the community. There is no charge to schools, an important consideration in todays school funding crisis. The Jackson Bottom Traveling program highlights yet another one of the many resources Jackson Bottom has to offer the community.

Water Quality Management: USA continues its major effort of providing water quality management in the Tualatin basin, with Jackson Bottom as the cornerstone for investigating the use of constructed wetlands for wastewater treatment. The JB Experimental Wetlands, JBEW, now in its sixth year, provides continuing research opportunites. Through the studies at the JBEW, it has been shown that constructed wetlands, while not the complete answer for nutrient polishing in the basin, will play an important role in the future as a part of water resource management in the watershed. In addition, serving as a model, the JBEW was visited by researchers and wetland experts interested in water quality management from around the globe, and has provided educational opportunities for local high school and university level students.

Wildlife Surveys: As in years past, investigating the wildlife that visit Jackson Bottom has been a priority; several surveys have brought good news about the impacts of the enhancement projects in the wetlands. An increase in nesting Canada geese, waterfowl and other wetland species last summer was documented in weekly surveys by volunteers from the Friends of Jackson Bottom and staff. Volunteers have participated in a regional survey of swans, the Audubon Christmas count, vegetation research and helped provide base-line information for some of the inventories for the Resource Management Plan. In addition, biologists from Oregon Dept. of Fish & Wildlife conducted bird banding surveys at Jackson Bottom.

Educational Opportunities in The Preserve: The numbers of tours and classroom programs continues to increase year after year, with visitors interested in many aspects of Jackson Bottom. Groups as diverse as scientists from Kenya, Poland and Australia, the general public, planning and public works directors, wetland researchers, girl and boy scouts, and elementary to university aged students visited the Bottom, explored its many faces while developing an understanding of the rich resources and possibilities present in urban wetland areas.

Citizen Monitoring Program: Jackson Bottom staff have been implementing a program to provide citizens the opportunity to collect needed information in Jackson Bottom. Information is being collected on wildlife, water quality and invertebrate populations as well as photo documentation from 32 locations in the Preserve.





**Second Wildlife Viewing Blind:** Built by the Cascade Education Corps, eight high school students and a crew leader completed the structure using the same design of the first viewsing blind designed by the Friends of Jackson Bottom. The wildlife viewing blind is part of a plan to provide visitors unique observation opportunites of migrating ducks and geese, Great Blue Herons and a wide variety of song birds.

Trail Extension Project: The Kingfisher Marsh Trail, built and maintained by the Friends of Jackson Botom, was be extended across Jackson Slough, through a riparian area of the Tualatin river, north to the Wet Prairie Enhancement project and back to the Wildlife Viewing Blind. The Cascade Education Corps completed the trail extension with plans to build another wildlife viewing blind in the summer of 1995.

#### Heron Marsh Restoration Project:

In the northeast comer of The Preserve, a new shallow marsh was developed as part of the wildlife enhancement goals of Jackson Bottom. The area is generally too wet throughout the summer months for USA's irrigation operation, making the location an ideal site to increase wildlife habitat values. The Hillsboro Airshow has dedicated funding for this project, with matching funds from ODFW and Ducks Unlimited. The six acre marsh was the home of 47 gooslings in the fall!

Interpretive Signs: Cedar Park Middle School students designed 32 full color interpretive signs for the Kingfisher Marsh Trail. Ecological concepts are explained to inform visitors of the unique habitat properties of Jackson Bottom. The signs and art work were dedicated during the Spring Wetlands Celebration in May.

#### Teacher In-service Programs:

Teachers have been bringing their classrooms to Jackson Bottom for wide variety of learning opportunities. Over the last year, teachers and universities have been utililizing the resources of the Preserve as a sounding board for starting wetlands education programs in the classroom. Portland State University, Pacific University, University of Portland, Oregon State University and Lewis and Clark College are all placing Jackson Bottom in teacher education and continuing education programs.

South Viewsite at Kingfisher Marsh: A viewing shelter was completed in the spring of 1993, allowing visitors to the Bottom fantastic views of Kingfisher Marsh, the Retention Pond and the riparian areas of the Tualatin River. The fully accessible structure and adjoining trail is tunded by the Hillsboro Airshow, Hillsboro Chamber of Commerce and generous volunteer support. In the summer of 1994-95, the Cascade Education Corps from Forest Grove finished the 1/4 mile trail leading to the new viewsite.



Wetlands Institute for Educators: From a grant through U.S. Fish & Wildlife and the Pacitic Northwest Joint Venture, Jackson Bottom staff have participated in this teacher in-service program in its third year of operation, teachers leave the program with the skills and knowledge to design and implement a student wetland citizen involvement program at their local site.

EPA Grant for Satellite Education: The Jackson Bottom message goes out via satellite. Through a program funded by the Environmental Protection Agency, Jackson Bottom staff designed and implemented a 10 week state wide wetland education program for middle schools. During the spring of 1995, over 500 students throughout Oregon will tune in their satellite dishes to participate in this interactive, two way telecommunications course.

### Volunteers and Jackson Bottom

Volunteers continue to be the backbone of Jackson Bottom Wetlands Preserve. While funding usually comes through the City, USA, the Steering Committee and through grants, much of the actual "on the ground" work is accomplished through volunteer support. In 1994, many very special people have stepped forward to help at Jackson Bottom. While this work is often fun and very rewarding (for instance, watching a bald eagle pursue a very concerned looking pintail), it is volunteers who have made the difference in the wetland preservation effort at the Bottom. It is impossible to list everyone who has given time and energy to the Preserve, but a big old thank you goes out to all involved.





# If you are wondering why there is so much concern about wetlands, here are some reasons.

### Wetlands are indispensable in doing a great job of providing:

- Habitat for fish and wildlife
- Flood protection
- Groundwater recharge
- Aesthetic values of open spaces
- Passive recreational activities
- Shoreline stabilization
- Streamflow maintenance
- Educational opportunities
- Water purification
- · Economic benefits

While laws and agencies can do a lot, community support is vital to insure that these landscapes will be maintained, and in many cases restored, for this and future generations of human and wildlife species.

