
Riverwalk Wetlands Preservation

**Presented by the Wetlands Preservation Group
February, 2020**



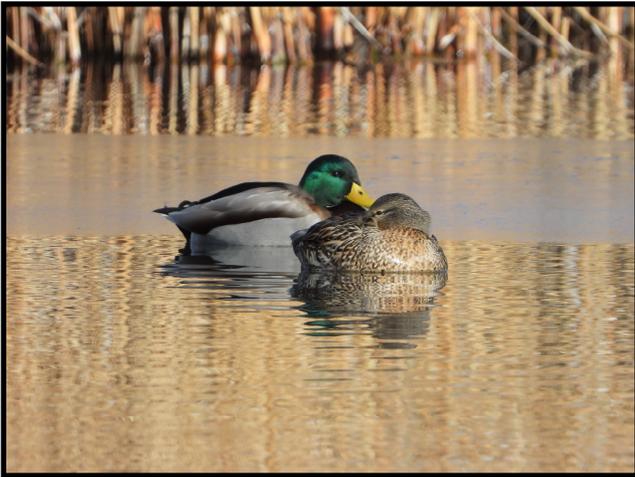
Introduction

We are pleased to present our concerns regarding the preservation of the Riverwalk Wetlands. We believe that the twin goals of environmental stewardship and town economic development need not be incompatible. We support both goals.

Mayor Don Volger has requested citizen input and we are here in that spirit of engaged community involvement and feedback. Today we will share with you our understanding of the value of these wetlands to our community, our concerns about development adjacent to the wetlands, and suggestions to eliminate possible harmful impact to the wetlands.

The speakers today are short and long term Pagosa Springs residents from different backgrounds, professions and environmental organizations including the Weminuche Audubon Society and Audubon Rockies.

We seek to highlight the importance of these wetlands and the natural diversity that they support. We hope you will find this information helpful.



Mission Statement

To Protect, Conserve and Enhance the Health and Beauty of the Riverwalk Hot Springs Wetlands.

- The town has made a commitment to preserve and protect the Wetlands by establishing a Conservation Easement for the portion of the Wetlands on Town property and provided pedestrian access by way of the 6th Street pedestrian bridge and paved River Walk. We applaud this commitment.
- We will work cooperatively with Government, Residents, Developers and other stakeholders consistent with the “*Town of Pagosa Springs Comprehensive Plan*” and its Vision, Goals and Action Plans.
- With due consideration of our current and future water resources, an appropriate use of Green Infrastructure, appropriate setbacks and building density for the protection of flora and fauna, and other human and environmental factors.
- In a manner that enhances the unique character, natural beauty, recreation opportunities and the diverse cultural heritage of Pagosa Springs.

Values of the Riverwalk Wetlands

- Provide fish and wildlife habitat. 80% of all wildlife species use wetland/riparian habitats at some point in their life cycle.
- Over 150 species of birds have been identified utilizing these wetlands, and 22 species suffering population declines have been found seeking refuge here.
- Geothermal water sources provide ice-free areas for wildlife in winter.
- Support a rich and unique community of alkaline-adapted plants.
- Protect and improve quality of water entering the river and water table through sedimentation, filtration and absorption.
- Provide economic value to our tourist economy through bird watching and wildlife viewing. The Riverwalk area is a designated birding “hotspot” drawing many birders and photographers to Pagosa Springs. There are over 45 million birders in the U.S. See handout on the economic benefits of birding.
- Provide nature-based experiences and aesthetic value to the local community. Used daily by visitors and residents for walking, bicycling, jogging, socializing, dog walking, and river access.
- Provide unique educational opportunities to the community and local schools that use the area for science education and naturalist-led interpretive walks.
- The public value of these wetlands has been formally identified in the Town of Pagosa Springs Updated Comprehensive Plan, Goal N-1.

Hydrology Background and Concerns

- Area of wetlands at issue is adjacent to the San Juan River, downstream of the 6th Street pedestrian bridge to the Apache Street Bridge.
- The health and biological diversity of the wetlands depends on suitable water quality and quantity. This is essential to the long-term viability of this unique ecosystem.
- Mineralized warm water sustains a rare community of plants adapted to alkaline conditions as well as supports an astounding diversity of bird species.
- The wetlands utilize a complex mixture of fresh and mineralized water sources:
 - direct precipitation (fresh water)
 - overflow from the river during high flow events (fresh water)
 - discharge from shallow groundwater associated with the river channel (fresh water)
 - hot/warm water from the hot springs source (mineralized water)
- Percentage of inflows from various water sources varies seasonally and year to year. To protect this area requires a better science-based understanding of the existing hydrologic conditions.
- Disruption and/or modification of inflows resulting from development could seriously, and perhaps irreparably, impact the integrity of the wetlands.

Environmental Concerns

Urban Development

- Urban development, especially high density, without adequate buffering and related safeguards directly impacts wetland health:
 - by removing native vegetation and introducing invasive non-native flora
 - increasing bank erosion and changing water flow patterns
 - squeezing out wildlife habitat, breeding and feeding areas
 - altering water levels by pumping or diverting water can dry-out or drown wetlands
 - increasing noise, water and light pollution

River Walk Wetland: Unique in Colorado



A Virginia Rail in our Riverwalk Wetland

Roads, Parking Lots, Construction and Landscaping Fill/Removal

- may narrow the floodplain and destabilize the river
- unfavorably alter the supporting hydrology.
- introduce harmful chemical runoff into surface water flows
- change drainage patterns from upland areas into the floodplain and wetlands threatening flora and fauna.
- pollution may enter the water table through pesticides, salts, development particulates, sewage, fertilizers, chemical spills, parking lot run-off and other ways.
- current Land Use Development Code contains no provisions to protect our current wetlands.

Providing an adequate “green buffer zone” between the Riverwalk Wetland and future development is our best protection.

- A lush filter strip of vegetation around the wetlands traps harmful chemicals, sediments, and pesticides on land before they can enter the water.
- Provides habitat for wildlife and reduces erosion. Native trees, grasses, and shrubs provide shade, cool temperatures, food, and shelter for animals and birds.
- The thick roots of grasses, wildflowers, and shrubs bind the soil to the banks, slow storm runoff, and prevent erosion and sedimentation.

Removal or lack of sufficient vegetation can irreversibly alter wetland function.

Recommendations

- Require a professional hydrology study of the wetlands and river corridor to understand how best to protect and enhance our wetland complex:
 - determine current water quantity and quality flows into the wetlands.
 - assess impacts of possible water quality and quantity changes from future development.
 - overlay the possible impact(s) of long-term climate change projections.
- Assess hazards the wetlands will face from proposed commercial development:
 - noise and light levels
 - building heights
 - water flow changes
 - pollutant runoff
 - setbacks
- Require an approximately 100' (or more) setback between the wetlands and proposed new commercial development to protect wetland integrity.
 - contour the setback with hills and plant with native plants
 - require safeguards from developers to mitigate commercial wetland hazards during and post development
- Encourage “water-wise” landscaping plans that specify native plants as food sources and protection (unrivaled by ornamental landscaping). We’ve discussed with Mr. Dronet the role of providing habitat onsite to mitigate impact(s).
- Work with all stakeholders (developers, Audubon, residents and town planners) to create a compelling vision for the future of the Riverwalk Wetlands. We all can do that by closely following the Vision and Goals of the **“2017 Town of Pagosa Springs Comprehensive Plan Update”** shown on the following page.

“Pagosa Springs values, protects, and enhances the beauty and health of its natural environment.”

- **Goal N-1:** Protect and conserve water resources, water quality, the San Juan River corridor, streams, lakes, wetlands, and geothermal resources.
- **Goal N-2:** Develop guidelines, regulations, and educational programs that protect area wildlife.
- **Goal N-4:** Maintain the scenic beauty of the natural environment.
- **Goal N-7:** Reduce the community’s contribution to climate change and prepare for a future that is adapted to a changing climate.
- **Goal AE-1:** Support and promote geothermal resources for recreation and energy production in the Pagosa Springs area.
- **Goal AE-2:** Protect geothermal resources to ensure the resource is available to current and future users.

*From “2017 Town of Pagosa Springs Comprehensive Plan Update,”
Chapter 2, “Environment and Energy” pages 7-15*

The Wetlands Preservation Group strongly supports these goals and is:

- Willing to work cooperatively with any and all stakeholders.
- Excited to create a shared vision of preservation for the future.
- Encouraged from our meetings with the Springs Resort and David Dronet.
- Grateful for the opportunity to engage in constructive discussions.