ENVIRONMENT & CLIMATE ELEMENT

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I. INTRODUCTION

1. Growth Management Act Requirements

The Growth Management Act was amended in 2023 (see HB 1181) to add a climate change and resiliency goal and element requirement, to ensure that local governments are prepared to adapt to and mitigate the effects of a changing climate (RCW 36.70A.070(9)). Accordingly, in the 2044 Comprehensive Plan Update, the City of Brier has created this new Environment & Climate Element, composed in part of natural environment goals and policies from the previous Land Use Element. Along with the sub-elements related to Critical Areas, the Shoreline Master Program, Endangered Species, and Natural Open Space; this element also consists of two new sub-elements: Greenhouse Gas Emissions Reduction and Resilience

2. Purpose of the Environment & Climate Element

The introduction of the Environment & Climate Element establishes a commitment to environmental stewardship as a defining feature of the City of Brier's identity.

The following introductory statement was thoughtfully crafted by The Brier Residents Tree Group, a group of over 64 Brier Residents who are mindful of the natural beauty Brier offers and are committed to assisting the city achieve the goals of the Environment & Climate Element.

> The City of Brier's logo depicts a quiet, residential area with walkable tree-lined streets and views of the Cascade mountains. This visually captures the historic character of Brier, which was first formally documented by a resident petition to incorporate as a city in the 1960s. The petition defended the "retention and protection of home and family privacy, as associated with ample size lots, natural woodlands, and quiet neighborhoods." As Brier has grown and developed, what were once abundant native forests and wetland habitats have become increasingly scarce.
>
> Today, the residents of Brier value the quality of life associated with quiet, low-density neighborhoods woven through with parks and natural spaces including wetlands, shoreline areas, and steep wooded slopes.
>
> The City of Brier commits to balancing the pressure of urban development with the responsibility of stewarding natural resources to benefit future generations of people and wildlife.
>
> Residents are proud of the city's generous park system and the mature Douglas Firs, Western Hemlocks, Western Red Cedars, Western White Pines, Pacific Dogwoods, Pacific Madrone, and other trees that grow throughout the city. Beyond enhancing public well-being and the City's natural beauty, native trees provide numerous practical benefits. They filter pollutants from the air, absorb carbon dioxide and produce oxygen, reduce stormwater runoff, stabilize slopes, reduce erosion, and provide habitat for wildlife.

The purpose of this element is to protect the critical areas and shorelines of the City of Brier and ensure that Brier is prepared to adapt to and mitigate the effects of a changing climate. To achieve this purpose the city is establishing goals to:

- Protect critical areas and natural resource lands
- Protect Endangered and Threatened Species and their ecosystems.

- Include actions to reduce or eliminate greenhouse gases (present and future) in order to reduce the rate and extent of climate change damage
- Improve climate preparedness, response and recovery efforts

The following are addressed in this Element:

1. Critical Areas;
2. Shoreline Master Program;
3. Endangered Species;
4. Trees and Natural Open Space;
5. Greenhouse Gas Emissions Reduction
6. Resilience

The Geologically Hazardous Areas, Wetlands, and Fish & Wildlife Conservation Areas are mapped in the figures following this element.

II. ENVIRONMENT & CLIMATE GOALS AND POLICIES

Natural Environment & Open Space

GOAL EOS 1.0: Allow for and accommodate growth in a manner that is fiscally responsible, responsive to the community, and enhances and protects the natural environment.

1. Environmental Constraints

E-1 Land use and zoning should reflect environmental constraints. The City of Brier shall preserve and protect environmentally sensitive areas to support important ecological functions and to avoid potential hazards to life and property. The Sensitive Areas Ordinance (Ordinance No. 252) shall provide regulations to implement this policy and maintain the natural wooded character of environmentally sensitive areas. The following environmentally sensitive areas are addressed in the Sensitive Areas Ordinance:

- Wetlands
- Fish and Wildlife Habitat Conservation Areas
- Frequently Flooded Areas
- Geologically Hazardous Areas
- Areas with unstable or defective soil permeability

E-2 As slopes increase, development intensity, site coverage and vegetation removal should be discouraged to reduce problems of erosion, landslides,

siltation and drainage.

E-3 Discourage development in areas where slopes are known to be unstable. In areas where the stability of slopes is in question, allow development only after a qualified professional can demonstrate that slopes will be stable after site modifications.

E-4 Discourage development on slopes in excess of 30 percent.

E-5 In areas susceptible to erosion, native ground cover should be retained, if possible, or replaced immediately after construction to ensure that slopes will be stable after site modifications.

2. Natural Land Forms

N-1 Preserve and promote the quality of natural landforms.

N-2 Strive to preserve steep hillsides and wooded areas in a scenic natural condition. Encourage replanting of denuded areas to enhance the scenic amenities of Brier and decrease the potential erosion hazards.

N-3 Recognize the advantages and opportunities afforded by the topography and plan its use accordingly. Discourage alteration of natural topography.

N-3 Discourage filling, grading or excavations of land when not in conjunction with the actual development of the land.

3. Water Resources

W-1 Protect and preserve water quality and natural drainage. Protect streams, wetlands and wetland buffers to preserve functions and values such as flood attenuation, wildlife habitat, filtration and groundwater exchange. This shall be accomplished through enforcing regulations in the Sensitive Areas Ordinance.

W-2 Enhance and maintain natural drainage systems and drainage courses to protect water quality and quantity of storm water runoff.

W-3 Recognize the importance of all levels of vegetation (i.e. trees, shrubs, under story) in regard to the drainage system.

W-4 Preserve streams and wetlands and their buffers in a natural condition.

W-5 Encourage the preservation and protection of marshes, ponds and watercourses for open space purposes and include them in the open space systems.

W-6 Require that all development adjacent to streams protects and preserves [natural vegetative] buffers to maintain a natural state, especially steep hillsides. Encourage replanting of denuded areas to decrease potential erosion hazards.

W-7 Piping and tunneling of water should be discouraged, or allowed only when going under a road. Bridging is encouraged over use of culverts for stream crossings. Where piping or tunneling is necessary, use oversized culverts.

W-8 Encourage open shallow ponding with slopes less than 3:1 for storm water detention and multiple use (i.e. playfields, parking, etc.).

W-9 The City shall coordinate with the Snohomish County Shoreline Management Master Program concerning development proposals along Swamp Creek or other shorelines of statewide significance.

4. Open Space/Natural Land

OS-1 A wide variety of lands should be preserved for park, open space, and greenbelt purposes including but not limited to:

1. Natural areas and natural features with scenic or recreational value;
2. Land that may provide public access to water bodies, natural areas and parks;
3. Lands which define through their natural features, land use boundaries and city boundaries;
4. Lands that visually or physically connect natural areas or provide important linkages for recreation and wildlife habitat, and;
5. Environmentally sensitive areas, including severe landslide hazard areas, steep slopes, and floodways of 100-year floodplains, wetlands, stream corridors, and habitat for established, threatened, endangered or highly sensitive wildlife species.

OS-2 Open space or natural areas should be encouraged to buffer differing types of land uses.

OS-3 Lands preserved for open space should provide multiple open space benefits whenever possible including active or passive recreation opportunities, scenic amenities, and fish or wildlife habitat.

OS-4 Areas designated as parks and open space should be preserved through incentives, trades, purchase of land, easements, or transfer of development rights.

OS-5 Adjacent development should relate to each other in a manner that will allow major areas of open space to be combined for their visual effect.

5. Vegetation

V-1 Provide that all land development include reseeding and replanting of cleared or poorly developed areas of vegetation to maintain a naturally green landscape, to ensure adequate erosion control and that such provisions be included as part of the clearing and subdivision ordinance.

V-2 Douglas fir's sporadic (every three or four years) seed crop production and its need for a warm seedbed situation makes natural germination a slow unpredictable process. Therefore, Douglas fir seedlings should be planted in open areas to give them a competitive edge over alders. Douglas fir will suppress alder, thereby reducing the time for natural succession to a subclimax forest.

V-3 Planting of the more drought-tolerant Douglas fir and red cedar should be undertaken in City-owned spaces that contain large stands of fully aged alder. This will insure that, as the short-lived alder dies, already established cedar and Douglas fir will take its place, producing longer-lived, more stable and more aesthetically pleasing greenbelts.

V-4 To minimize erosion, silting of streams, clogging of storm sewers, and other related problems, existing trees and ground cover should be maintained where possible, not removed or buried. Selective clearing, reseeding and replanting practices can help minimize these problems and should be included in a clearing ordinance.

V-5 Brier has several fragile ecosystem areas such as marshes, bogs, streams, and other areas that support unusual groupings of plants and animal species. These areas should be further inventoried in the Park Plan. Some should be included in open space planning or developed as private open space tracts, through the open space option of the subdivision ordinance.

V-6 Recognize that noise and visual pollution can be minimized by both retaining belts of vegetation and by replanting a mixture of trees and shrubs around high noise generators such as arterials, schools, recreational sites, etc. Further studies are recommended concerning noise and visual pollution problems in the community, toward development of plans to retain or replant vegetation areas as well as replant noise and visual screens.

V-7 A City-wide landscape plan should be developed as part of the Park Plan to provide a basis for: a. Further inventories of vegetation. b. Open space planning and acquisition proposals.

6. Greenhouse Gas Emissions Reduction

Goal G 1.0 Increase housing diversity and supply within urban growth areas to reduce greenhouse gas emissions and support environmental justice.

G-1 Increase or remove density limits in areas well-served by transit and other services within the urban growth area.

G-2 Allow middle housing types, such as duplexes, triplexes, and ADUs, on all residential lots.

Goal G 2.0 Encourage that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions.

G-3 Encourage additional net-zero greenhouse gas emission features of all new residential and commercial structures.

G-4 Retrofit buildings for energy efficiency.

7. Resilience

Goal R 1.0 Establish land use patterns that increase the resilience of the

built environment, ecosystems, and communities to climate change.

R-1 Direct new development into areas where exposure to climate hazards is low.

R-2 Establish overlays, special zoning districts, design standards, or other strategies to increase resilience to climate hazards.

R-3 Maintain and update a critical areas ordinance that incorporates climate change considerations.

R-4 Restore and maintain critical areas and open space areas to maximize the climate resilience benefits they provide.

Goal R 2.0 Encourage that development and redevelopment projects are resilient to the impacts of climate change.

R-5 Establish development regulations that incorporate best practices for reducing the risk of wildfire, extreme heat, flooding, and other climate-exacerbated hazards.

R-6 Review required buffers and setbacks for steep slopes and shorelines vulnerable to erosion exacerbated by climate change, and establish new minimums, if necessary, so that improvements are not required to protect structures during their expected life.

R-7 Consider future climate conditions during siting and design of capital facilities, including changes to temperature, rainfall, and sea level, to help ensure they function as intended over their planned life cycle.

Goal R 3.0 Encourage that energy infrastructure — including generation and transmission — is able to accommodate renewable energy opportunities and to withstand and recover quickly from the impacts of extreme weather and other natural hazards worsened by climate change.

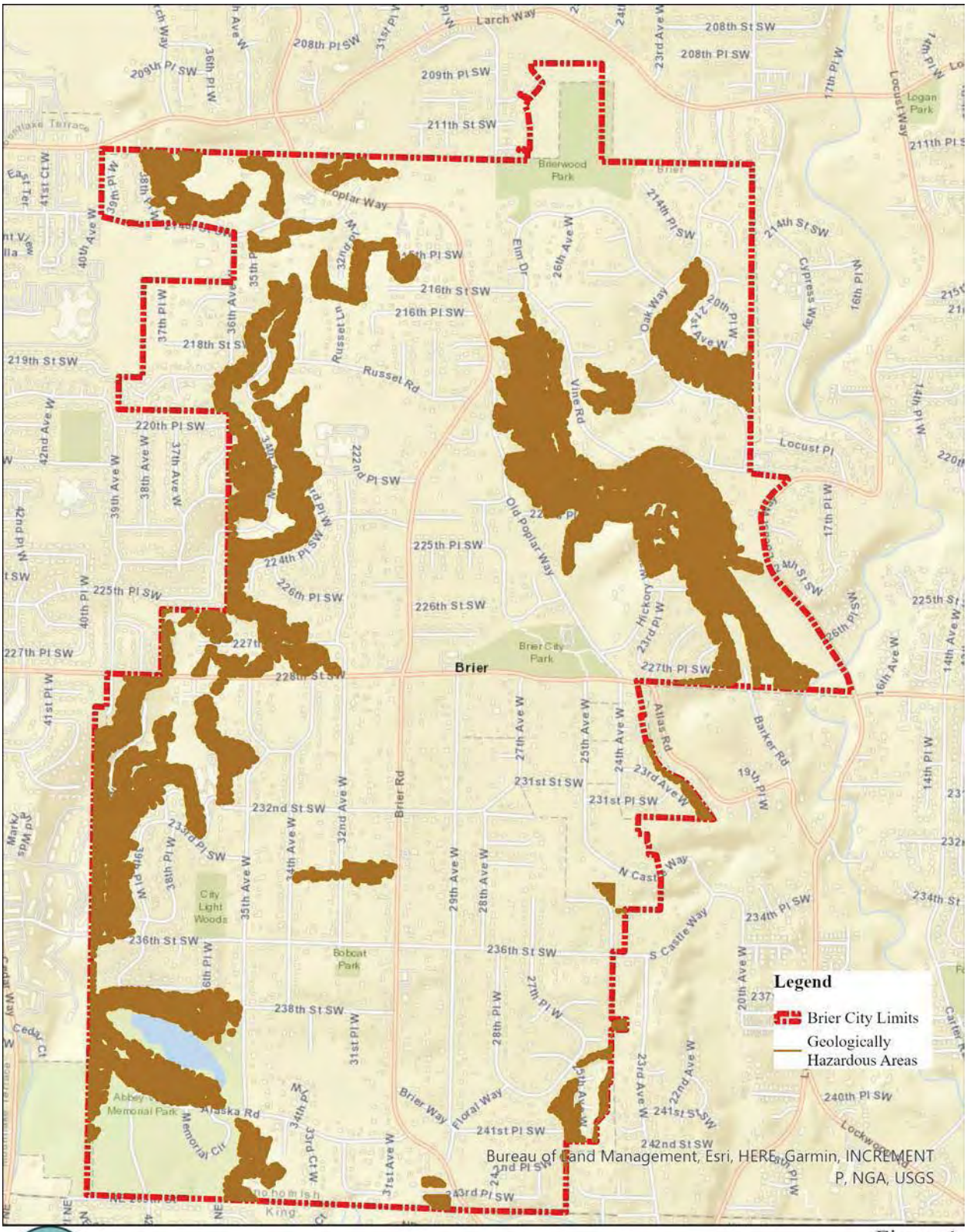
R-8 Work with energy utilities to improve the safety and reliability of infrastructure vulnerable to climate change.

R-9 Require new subdivisions to bury electricity transmission lines and associated infrastructure to reduce damage from storms and wildfire ignition risks.

Goal R 4.0 Encourage that buildings are designed and built sustainably to reduce environmental impacts and remain resilient to extreme weather and other hazards worsened by climate change.

R-11 Require the design and construction of commercial and residential buildings and their surrounding sites to reduce and treat stormwater runoff and pollution.

1



CITY OF BRIER ESTD 1965

Figure 1.
Geologically Hazardous Areas
December 2024

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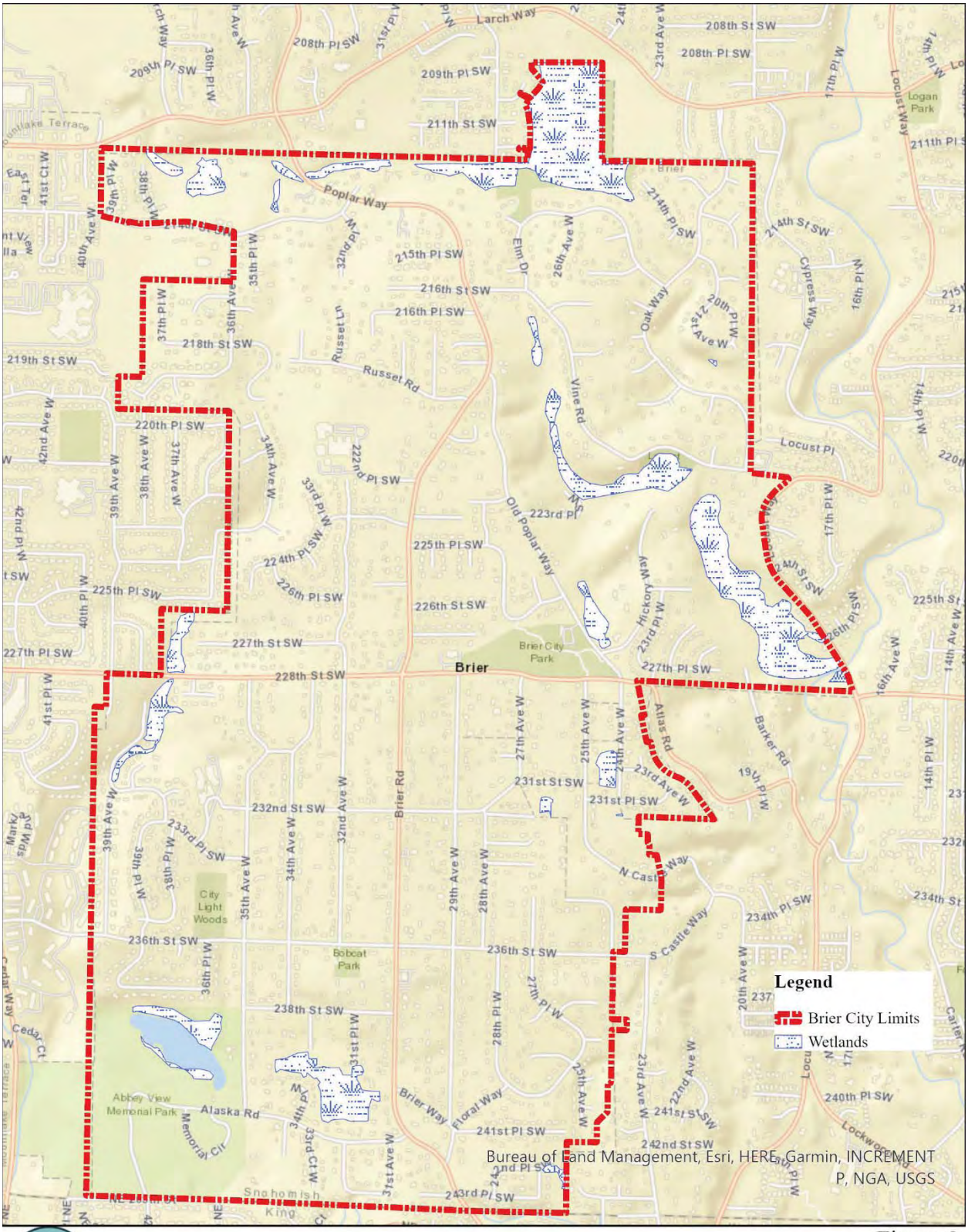
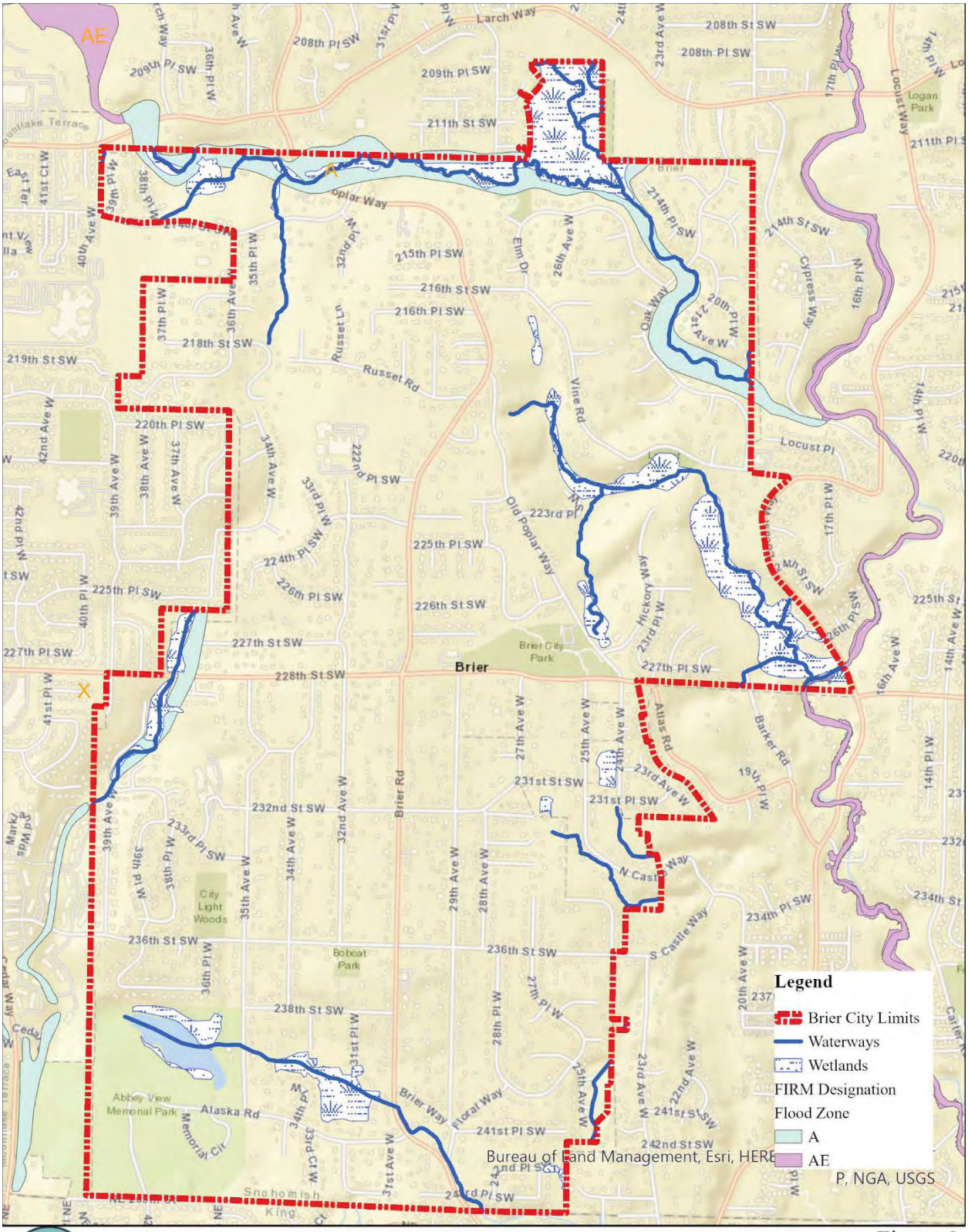


CITY OF BRIER ESTD 1965

Figure 2.
Wetlands
December 2024



CITY OF BRIER ESTD 1965

0 0.13 0.25 0.5 Miles

Figure 3.
Fish & Wildlife Conservation Area
December 2024