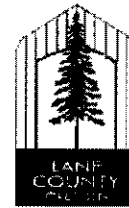


W. J. A.

AGENDA COVER MEMO



Memo Date: January 4, 2011
First Reading Date: January 18, 2011
Second Reading/Public Hearing Date: February 7, 2011- JOINT with Springfield City Council

TO: Board of County Commissioners
DEPARTMENT: Public Works, Land Management Division, Planning Department
PRESENTED BY: Stephanie Schulz, Associate Planner
AGENDA ITEM TITLE: **Ordinance No. PA 1277** --In The Matter Of Amending The Springfield Local Wetland Inventory, The Springfield Inventory of Natural Resource Sites, And The Springfield Natural Resources Study, To Include Newly Identified Wetland And Riparian Sites And To Update The Boundaries Of Known Sites Within The Glenwood Area; And Adopting A Severability Clause. (File No. PA 10-6053)

I. MOTION:

For January 18, 2011: Move approval of the first reading and setting the second reading and public hearing on Ordinance No. PA 1277 for February 7, 2011 at 7:00 p.m.

For February 7, 2011: Move approval of Ordinance No. PA 1277.

II. AGENDA ITEM SUMMARY

City of Springfield proposes to amend the "Springfield Local Wetland Inventory," the "Springfield Inventory of Natural Resource Sites," and the "Springfield Natural Resources Study" to add newly identified wetlands and important riparian sites in the Glenwood area and to update the boundaries for some of the previously inventoried Glenwood sites.

III. BACKGROUND/IMPLICATIONS OF ACTION

A. Board Action and Other History

Natural resource preservation is one of Oregon's Statewide Planning Goals. Planning Goal 5 states:

"Local governments shall adopt programs that will protect natural resources and conserve scenic, historic, and open space resources for present and future generations. These resources promote a healthy environment and natural landscape that contributes to Oregon's livability."

In 2005, the Springfield Natural Resources Study (**NR Study**) was adopted by the Board of Commissioners and the City Council to comply with the mandate of Statewide Planning Goal 5. The NR Study addresses the protection of locally significant wetland and riparian resources that were adopted as part of the Springfield Local Wetland Inventory (**Wetland Inventory**) in 1998 and the Springfield Inventory of Natural Resources (**NR Inventory**) that was adopted by both Council and the Board of County Commissioners in 2004.

The City of Springfield and Lane County are required by the Department of Land Conservation and Development (DLCD) to coordinate updates to the 1995 adopted Goal 5 Inventories for *wetlands, riparian corridors, and wildlife habitat*. Springfield completed its Goal 5 local wetland inventory in 1998. The Springfield Inventory of Natural Resource Sites (Inventory) replaced the criteria and inventoried sites within the Springfield UGB that are listed in the "Significant Vegetation and Wildlife Areas" table in the Natural Assets and Constrains Working Paper.

In 2009, Springfield contracted with Lane Council of Governments (LCOG) to coordinate the completion a new wetland and riparian inventory for the Glenwood area in preparation for an update to the Glenwood Refinement Plan. LCOG and the consulting firm, Pacific Habitat Services have completed the inventory work. Through this work, three new riparian sites were identified in Glenwood and are proposed for addition to the NR Inventory. Four new wetland sites were also identified and are proposed for addition to the Wetland Inventory. This new riparian and wetland information is the basis for the proposed amendments to update the NR Study. In most cases the newly identified wetland and riparian sites are already protected under existing provisions of the Springfield Natural Resources Study, the Springfield Stormwater Management Program or by the Glenwood Refinement Plan.

Location/Plan Designation/Zoning

These sites are all located in Glenwood, which is the neighborhood East of I-5 between Eugene and Springfield. Franklin Blvd. parallels the Willamette River on the North side of the neighborhood and the Willamette River defines the Eastern edge of Glenwood, which extends south to the end of the Urban Growth Boundary. This amendment provides Overlay Map status on the critical areas, not Plan Designation or Zoning changes.

Site Characteristics

The subject sites are all wetlands or riparian areas.

B. Policy Issues

The Board of Commissioners implements the policies of working with local government partner's on land use issues in the Metro area and the policy of good environmental stewardship where property development intersects with important and significant ecosystems such as wetlands and riparian areas.

C. Board Goals

Adoption of this ordinance after conducting a joint public hearing supports the following Lane County Strategic Goals adopted by the Board:

- Provide opportunities for citizen participation in decision making, voting, volunteerism and civic and community involvement.
- Contribute to appropriate community development in the areas of transportation and telecommunications infrastructure, housing, growth management and land development.

D. Financial and/or Resource Considerations

Identification of wetlands and significant riparian areas during the planning stages of neighborhood development adds certainty for property owners in knowing where and what is appropriate for development along rivers and sloughs, and not in wetlands.

E. Analysis

Adding the new Glenwood wetland and riparian information to the NR Inventory, Wetland Inventory and the NR Study requires both the city and county elected officials take action on the proposal. Periodic Review in the Metro area was completed in 2005 and the Wetland and NR Inventories and the NR Study were Springfield-specific products that were adopted as "refinement plans" to the *Metro Plan*. The refinement plan amendment procedure is described in Chapter IV of the *Metro Plan* and addressed in the City Findings. The criteria for Board approval of this action is found in the *Metro Plan* and Lane Code Chapter 10. The Findings of Compliance with these criteria, including, by reference, compliance with Statewide Planning Goals and *Metro Plan* requirements is found in Exhibit D to the County Ordinance.

The ESEE analysis required by OAR 660-23-090 to adopt regulations regarding these sites is designed to address inherent conflicts between these four factors: Energy, Social, Environmental and Economic impacts and trade-offs. Springfield recommends a program for protecting sites on the NR and Wetland Inventories under the allowed "standard process".

Under the standard process, cities are required to make a decision on each site to 1) prohibit conflicting uses (development); 2) limit conflicting uses; or 3) allow conflicting uses. A decision to prohibit conflicting uses would fully protect resource sites, in many cases not even allowing passive recreational trails or paths. Limiting conflicting uses allows some development, but seeks to protect the most important functions and values of each resource site. A decision to allow conflicting uses would provide no protection for resource site.

Based on the ESEE analysis conducted for each site on the Wetland Inventory and the NR Inventory, this NR Study proposed a protection program based on a decision to "limit conflicting uses." Keep in mind that this study only addressed "locally significant" wetlands and riparian corridors that are listed on the NR and Wetland Inventories. The focus on significant wetlands and riparian sites is mandated by state planning rules. There are several lower quality wetlands and watercourses which were not protected by the policies adopted in the NR Study. These sites that were not protected by the study are still under the jurisdiction of the Oregon Department of State Lands and or the Corps of Engineers. These agencies continue to be the sole authority for issuing permits to impact wetlands and streams. The City's natural resource protections are supplemental to the authority of these agencies.

To implement a "limited" protection program, the NR Study took the following approach:

1. It supported the existing protections implemented through Springfield's Stormwater Quality Management Program. The adopted Goal 5 limited protection program deferred to existing stormwater management policies detailed in Section 4.3-115 of the Springfield Development Code (SDC) and in particular those provisions which support the City's response to state and federal regulations concerning surface and subsurface discharging stormwater management systems. Sites protected by the Stormwater Management Program were not recommended for additional protection.
2. It established 25-foot development setbacks from inventoried wetlands and riparian resource sites that are not already protected by stormwater policies. The 50 and 75 foot setbacks established by the Stormwater Quality Management Program would be retained.
3. Protection policies were applied to new development. Developed properties were not required to retroactively comply with the adopted policies. The provisions of SDC Section

5.8-100—Non-Conforming Uses, provide “grandfather” protections to existing development. Expansion of existing development is not allowed where such expansion is outside of the resource area.

4. Site plan review was required for all commercial, industrial and multi-family residential development within 150-feet of resource sites. SDC Sections 4.3-115 and 4.3-117 describe wetland and riparian protections that are applied in the site plan review process to help reduce the impact of development. This requirement coincides with the defined 150-foot impact area recommended by this study and the 150-foot site plan review area already required for many of Springfield’s resource areas by the Stormwater Quality Management Program. Construction of a single-family home within an existing subdivision would not require site plan review.
5. The adopted protection program primarily affects vacant land and future development. Existing uses and structures within the proposed 25-foot setbacks are allowed to continue. Expansion of such uses is permitted outside the setback. Development within the 50 and 75-foot setbacks established under Springfield’s Stormwater Quality Management Program would be subject to the policies of that program.
6. Where the proposed 25-foot setback renders a property unbuildable for the purposes for which it was zoned, a hardship variance may be requested to assist the owner to achieve a viable development design. Such a hardship variance is required under state administrative rules (OAR 660-023-0090 (8) (d) and 660-023-0100(4) (b) (d)).

The proposed amendments are designed to insert the new Glenwood wetland and riparian information into the existing Wetland and NR Inventories and to add the required conflicting use and ESEE analysis to the NR Study to support the recommended protection for the sites. Many of the Glenwood sites are already protected by 50-foot and 75-foot development setbacks provided by the City’s stormwater management program that was adopted in 2002. Sites not protected by the stormwater program tend to be smaller and are recommended for 25-foot setbacks. This is consistent with the protections applied to Springfield’s wetlands and riparian sites in 2005. The regulatory approach recommended by staff is to assign the same protections to the new Glenwood sites as those used as recommended by the 2005 NR Study for similar sites.

Criteria

Statewide Planning Goals & Applicable State Statutes.

See the Staff Report in Attachment 2 for the referenced Findings of Compliance with the Statewide Planning Goals and applicable State Statutes (ORS”). Lane County Findings to reference and incorporate the city findings with the County adoption are attached to the County Ordinance as Exhibit D.

Lane Code 10.315-20 Criteria.

Zonings, rezoning’s, and changes in the requirements of this chapter shall be enacted to achieve the general purpose of this chapter and shall not be contrary to the public interest. In addition, zonings and rezonings shall be consistent with the specific purposes of the Zone District classification proposed, applicable Comprehensive Plan elements and components, and Statewide Planning Goals...

Board co-adoption of this amendment will update the NR Inventory for an urbanizable area of Springfield as referenced in Chapter 10 and achieve the general purpose of this chapter for regulation in Glenwood which lies between Springfield city limits and the urban growth boundary of Springfield. Having consistent development regulations applicable to the urbanizable areas of Springfield provides certainty and clear development guidelines for property owners as land uses transition from rural to urban uses in the Metro Home City of Springfield.

Lane Code 10.600-10 Springfield Urban Growth Boundary.

The City of Springfield shall have the responsibility and the authority to administer its land use regulations on urbanizable land within the Springfield Urban Growth Boundary. For all be enacted to achieve the general purpose of this chapter and shall not be contrary to the public interest. In addition, zonings and rezonings shall be consistent with the specific purposes of the one District classification proposed, applicable Comprehensive Plan elements and components, and Statewide Planning Goals...

Lane Code 10.600-10 allows for adoption of these implementing regulations for application by Springfield on urbanizable lands, which is consistent with the Metro Plan and is not contrary to the public interest. The Ordinance Exhibit 'D' includes findings of compliance with applicable Metro Plan policies and Statewide Planning Goals.

Referral Comments Received

Ballot Measure 56 Notice required under state law (Attachment 4) was sent to all affected property owners on December 30, 2010 which included invitation to an Open House held in the neighborhood on January 6, 2011. Published notice of the hearing and opportunity to comment was advertised in the Register Guard on December 30, 2010, consistent with Board policy of public involvement. Any written responses to these notifications from the public will be provided to the Board prior to or at the hearing.

F. Alternatives/Options

Option 1. Approve the Ordinance as presented.

Option 2. Revise the Ordinance as directed by the Board and return for approval of the revised Ordinance on a date certain set by the Board.

Option 3. Do not approve the Ordinance and deny the application.

IV. TIMING/IMPLEMENTATION

The required field research, mapping and documentation for this proposed update to the NR Inventory to add wetland and riparian sites in Glenwood is completed. The identified sites must be included in the inventories for planning consistency and the attached County Ordinance and Findings support co-adoption of this update to the baseline planning work for the Glenwood Master Plan

V. RECOMMENDATION

Staff recommends Option 1.

Based on the findings presented in this report, staff believes there is an adequate factual basis for the Lane County Board of Commissioners to conclude that the proposed Glenwood additions to the Wetland Inventory, the NR Inventory and to the NR Study meet the criteria for approving refinement plan amendments found in Lane Code Chapter 10.

VI. FOLLOW-UP

Notice of Board action will be provided to DLCD and all interested parties upon adoption by the Board. If the Board revises the Ordinance as presented (Option 2), a third reading would be scheduled for a date certain set at the close of the hearing. If the record is held open to solicit further testimony, that date certain will be announced and any material submitted would be provided to the Board prior to the third reading. Should the Board choose option 3, an Order with findings setting forth the Board's reasons for denying the Ordinance would be prepared and returned to the Board for a third reading and adoption on a date certain set by the Board.

VII. ATTACHMENTS

1. Ordinance No. PA 1277

Exhibit A – Amendments to the Springfield Local Wetland Inventory

Exhibit B – Amendments to the Springfield Inventory of Natural Resource Sites

Exhibit C – Amendments to the Springfield Natural Resources Study

Exhibit D: Findings of Fact and Reference to Approval Criteria Analysis

2. Springfield Application: Glenwood Update to the Natural Resources Study, Staff Report and Findings to Correspond with County Action (Note: A notebook is available containing the original Springfield Local Wetland Inventory, Springfield Natural Resource Sites Inventory and Springfield Natural Resources Study that will be amended. This resource is located at the reception desk in the County Administration Office for ease of public access and review)

3. Ballot Measure 56 Property Owners Notice and Agency Referral

4. Staff Response Comments Received (any additional responses will be presented via supplemental)

Darwin & Bonnie Webster

Alpesh Patel

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDINANCE NO. PA 1277)IN THE MATTER OF AMENDING THE SPRINGFIELD LOCAL
)WETLAND INVENTORY, THE SPRINGFIELD INVENTORY OF
)NATURAL RESOURCE SITES AND THE SPRINGFIELD
)NATURAL RESOURCES STUDY, TO INCLUDE NEWLY
)IDENTIFIED WETLAND AND RIPARIAN SITES AND TO
)UPDATE THE BOUNDARIES OF KNOWN SITES WITHIN THE
)GLENWOOD AREA; AND ADOPTING A SEVERABILITY
)CLAUSE. (Applicant: Springfield, File No. PA 10-6053).

WHEREAS, in 2006 the Lane County Board of Commissioners enacted Ordinance No. PA 1233, which adopted the Springfield Natural Resources Study Report (October 2005) (NR Study) which includes as appendices the Springfield Inventory of Natural Resource Sites (Appendix A) (NR Inventory) and the Springfield Local Wetland Inventory (Appendix B) (Wetland Inventory) and prescribes protection measures for the wetland and riparian resource sites identified in the Wetland and NR Inventories within the Springfield Urban Growth Boundary; and

WHEREAS, a new inventory of wetland and riparian resources in the Glenwood area has identified additional resource sites and refined the boundaries of known sites, and has prompted the need to amend the NR Study, the NR Inventory, and the Wetland Inventory; and

WHEREAS, amendments to the NR Study, which was adopted as a functional plan of the Eugene-Springfield Metropolitan Area General Plan (Metro Plan), are processed as refinements to the Metro Plan; and

WHEREAS, Lane Code Chapter 12 sets forth procedures for the amendment of the Metro Plan and any adopted Refinement Plans; and

WHEREAS, a public open house was held on January 11, 2011, to provide opportunity for interested parties to learn more and for staff to explain the proposed amendments to the NR Study, the NR Inventory and the Wetland Inventory and to receive public comment; and

WHEREAS, the Springfield Planning Commission held a public hearing on the Glenwood amendments to the NR Study, the NR Inventory and the Wetland Inventory and voted to recommend approval of the amendments to the Lane County Board of Commissioners and City Council based upon findings in support of adoption of these amendments; and

WHEREAS, the Board may make decisions in the urbanizable area of Springfield based on a Springfield Planning Commission recommendation and consideration of evidence and testimony presented at public hearing and in the record; and

WHEREAS, the elected officials of Lane County and the City of Springfield held a joint public hearing on the proposed Glenwood amendments to the NR Study, the NR Inventory and the Wetland Inventory on February 7, 2010 and the Board is now ready to take action on this matter based upon the above recommendation and the evidence and testimony already in the record as well as the evidence and testimony presented at this public hearing; and

WHEREAS, based on recommendation and consideration of the evidence and testimony in the record demonstrating that the proposed amendments comply with the criteria for approving Metro Plan amendments;

NOW THEREFORE, the Board of County Commissioners of Lane County ordains as follows:

Section 1: The proposed Glenwood amendments to the Springfield Local Wetland Inventory, attached as Exhibit A and incorporated here by this reference, are adopted and made part of the Springfield Local Wetland Inventory previously adopted by the Board of Commissioners as Appendix B to the Springfield Natural Resources Study Report.

Section 2: The proposed Glenwood amendments to the Springfield Inventory of Natural Resource Sites, attached as Exhibit B and incorporated here by this reference, are adopted and made part of the Springfield Inventory of Natural Resource Sites previously adopted by the Board of Commissioners as Appendix A to the Springfield Natural Resources Study Report.

Section 3: The proposed Glenwood amendments to the Springfield Natural Resources Study, attached as Exhibit C and incorporated here by this reference, are adopted and made part of the Springfield Natural Resource Study Report previously adopted by the Board of Commissioners.

FURTHER, although not part of this Ordinance, the Board of County Commissioners adopt the Findings set forth in Exhibit D to this Ordinance in support of this action.

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion thereof.

ENACTED this ____ day of _____, 2011.

Chair, Lane County Board of Commissioners

Recording Secretary for this Meeting of the Board

APPROVED AS TO FORM

Date 1-11-2011 Lane County

Stephen J. Corbett
OFFICE OF LEGAL COUNSEL

Ordinance No. PA1277 – In The Matter Of Amending The Springfield Local Wetland Inventory, The Springfield Inventory Of Natural Resource Sites And The Springfield Natural Resources Study, To Include Newly Identified Wetland And Riparian Sites And To Update The Boundaries Of Known Sites Within The Glenwood Area; And Adopting A Severability Clause. (1/19/11;

2/7/11)(Applicant: Springfield, File No. PA 10-6053).

Exhibit A: Springfield Local Wetland Inventory Report
Strikeout text is removed. Shaded text is added.

[Insert at pg. "Local Wetland Inventory Summary-9"]

Wetland W19 is 41.65 acres and is classified as POW/PKO. The wetlands were determined through on- and off-site methods. The wetlands are adjacent to the Springfield Sheriff's pistol range and the northern end of the Mill Race that has been widened to create a log pond for a mill. Soils were dark in color with mottles. Hydrology was indicated by the dominance of hydrophytic vegetation and presence of surface water in depressions. The wetland limits were determined where the vegetation changed and there were no longer indicators of hydrology and through use of black and white and infrared aerial photo interpretation and are limited to TOB.

[W19 was inadvertently left off of the original Local Wetland Inventory descriptions]

Wetland W20 is 3.39 acres and classified as PSS/PAB. The wetland is adjacent to Glenwood Slough and the railroad tracks. Overstory dominant species include Oregon ash, Oregon white oak (*Quercus garryana*) and big leaf maple. Understory dominant was willow (*Salix* sp.). Herbaceous dominants were yellow flag iris (*Iris pseudoacorus*), spreading rush (*Juncus patens*) and marsh horsetail (*Equisetum arvense*). Soils were dark in color with mottles. Seasonal hydrology was indicated by the dominance of hydrophytic vegetation and presence of surface water in depressions. The wetland limits were determined where the vegetation changed and there were no longer indicators of hydrology.

Wetland W20 is 3.39 acres and is classified a Palustrine Shrub-Scrub wetland. The wetland is adjacent to Glenwood Slough and the railroad tracks. It is part of the Glenwood Slough. It flows northwesterly to W-21 and is being conveyed and flowing into the Willamette River. W-20 is bisected by Glenwood Slough but is still hydrologically connected by a culvert. The Slough is a topographic bowl. Hydrologic sources include stormwater from adjacent impervious surfaces, in addition to groundwater and upslope surface water. A portion of W-20 was previously delineated (WD96-037).

The dominant wetland vegetation includes Oregon Ash, Sinker Willow, Red Osier Dogwood, Field Mint, Bogus, Sunk, Soft Rush and Short Scale Sedge.

Soil types include: Chenais silty clay loam.

Wetland W21 Wetland W-21 is .47 acres and is classified as a Palustrine Shrub-Scrub (PSS) wetland. The wetland is located under and east of the Interstate 5 Bridge just south of Franklin Blvd. W-21 was delineated in 2003 (WD2003-0273) as part of the ODOT's I-5 bridge project and Willamette River work. The wetland was impacted by construction of the I-5 temporary detour bridge. W-21 is bounded to the south by railroad tracks. Glenwood Slough flows through the wetland as does overland flow from upslope stormwater. The wetland is less than one-half acre and is a hydrologically significant wetland because of its hydrologic connection to the Willamette River. It is also connected to W-22 and W-23.

The dominant wetland vegetation includes Oregon Ash, Pacific Willow, Black Cottonwood, Red Osier Dogwood, Slough Sedge, and Creeping Buttercup.

Soil types include Chehalis silty clay loam, Penza Urban land complex.

Wetland W22 is 2.58 acres and is classified as a Palustrine Forested wetlands (PFD). W-22 is a PFD system located with a drainage that flows through the southern portion. Portions of the wetland have been previously delineated (WDS 02-1273-00-0102-98-0051). PHS did not have access to the easternmost and southern portions of W-22 and boundaries were determined through on-site observations, previous delineations, and aerial photography.

The dominant wetland vegetation includes Oregon Ash, Pacific Willow, Black Cottonwood, Red Alder, Clustered Wild Rose, Red Osier Dogwoods, Slough Sedge, Nipplewort and Soft Rush.

Soil types include Chehalis silty clay loam.

Wetland W23 is .87 acres and is classified as Palustrine Emergent (PEM) wetland. W-23 is a series of small PEM wetlands located within the ODOT ROW and on private property. The wetlands were delineated in 2004 for the 4th bridge project (W-008-0140). The wetlands are located on the bottom of a steep slope. Hydrology from the wetlands flows into a channel that drains to the north into the Willamette River. The wetlands located in the ODOT ROW are above and below the bridge.

The dominant wetland vegetation includes Black Cottonwood, Wild Mint, Beggar's Tick, Soft Plant, Sawtooth Sedge, Southwings, Common Watercress, English Blinnard, Fall Peppercorn, and Bluegrass sedge.

Soil types include Dixonville-Philomath-Hazelair Complex.

Wetland W-24 is .51 acres and is classified as a Palustrine Forested wetland (PFD). W-24 is located at the bottom of surrounding steep slopes. There is a narrow intermittent drainage channel that flows through the middle of the wetlands. This drainage continues east through a long culvert under McVay Hwy. and the railroad and out to the Willamette River. W-24 is located between I-5 and McVay Hwy. with residential land uses to the north and south.

The dominant wetland vegetation includes Black Cottonwood, Pacific Willow, Red Osier Dogwood, Reed Canary Grass, Water Parsley, Stinging Nettles, Slough Sedge and Field Horsetail.

Soil types include Dixonville-Philomath-Hazelair Complex.

Wetland W25 is 4.91 acres in size and is a Palustrine Forested wetland (PFD) area bounded on all sides by railroad tracks. PHS was able to view the wetland from adjacent road ROWs and the Franz bakery property to the east. It is surrounded by adjacent commercial properties. There is a drainage located along the southern portion of the wetland. It flows north west into a large culvert.

located within the ROW of Glenwood Boulevard that is believed to flow into GS-3/Glenwood Slough.

Adjacent upland species: *Acer macrophyllum*, *Pseudotsuga mensiezi*, *Rubus discolor*, *Corylus cornuta*, *Carex leptopoda*, *Convolvulus* sp., *Hedera helix*, *Agrostis stolonifera*, *Symphoricarpos albus*.

Soil types include: Chehalis silty clay loam.

Wetland 26 is .86 acres in size and is a mosaic of 50% wetland and 50% upland located on undeveloped land north of I-5 at the top of a steep slope. It is relatively flat and appears to have been significantly disturbed in the past by scraping. Plant species include a mixture of upland and wetland species. Several areas had mottling and oxidized rhizospheres, despite the general lack of dark chroma soils. Deep tire ruts bare evidence of seasonally wet conditions.

Adjacent upland species: *Rhus diversilobum*, *Crataegus monogyna*, *Rubus discolor*, *Festuca arundinacea*, *Daucus carota*, *Hypericum perforatum*, *Cirsium vulgare*, *Chrysanthemum leucanthum*, *Centaurea pratensis*.

Soil types include: Urbanland/Hazelair-Dixonville complex.

The tables below summarize the size and classification of the wetland areas within Springfield's Urban Growth Boundary.

Table 1.
City of Springfield Wetlands—McKenzie River Basin Wetlands

Site Number	OFWAM Significance	Acres	USFWS Classification(s)	"Other" Created Waters (Acres)
M1		4.94	RLP	
M2		3.12	PEM	10.50
M3		2.73	PEM/PFO	
M4	Locally Significant Wetlands Special Interest for Protection	5.02	PEM	
M5	Locally Significant Wetlands	9.13	PFO/PSS/PEM	
M6		4.05	PEM/PSS	
M7		0.2	PEM	
M8*		0.2	PSS	
M10*		2.72	RIN	
M11*		1.01	POW	
M12		1.22	PEM	
M14	Locally Significant Wetlands	33.45	PEM/PFO	
M15		6.41	PEM	

Site Number	**OFWAM Significance	Acres	USFWS Classification(s)	"Other" Created Waters (Acres)
M16	Locally Significant Wetlands	8.44	PFO/POW/RLP/PEM	
M17		3.15	PEM	
M18*		40.72	POW/PSS	16.75
M19		0.37	PFO	
M20	Locally Significant Wetlands	0.52	RLP	
M21		0.39	PEM	
M22		0.1	PEM	
M23		0.19	PEM	
M24		0.51	PEM	
M25		24.0	PEM	
M26	Locally Significant Wetlands	1.85	PFO/PEM/PSS	
M27		8.28	PEM/PFO	
M28	Special Interest for Protection/Mitigation	1.51	PEM	
M29	Locally Significant Wetlands Special Interest for Protection	1.08	PFO/PEM	
M30		6.49	PFO/PEM/POW	
M31		0	POW	8.06
M32		3.39	PEM	
M33		13.75	POW/PSS/RLP	116.17
M34		0.8	PFO	
M35		4.91	PEM	
M36		0.75	PEM	
M37		0.4	PEM	
M38		0.08	PEM/PFO	
M39*		1.88	PEM	
M40		16.51	RLP	
	Total	214.27		151.48

*denotes off-site wetland determination and mapping

** Subsequent to the adoption of the Springfield Local Wetland Inventory, a state mandated analysis was completed to determine which wetlands were "locally significant" under state law. The results of the analysis are added to the summary information found in Tables 1 and 2. The term OFWAM stands for the Oregon Freshwater Wetland Assessment Methodology which by state mandate, is the analytical tool that is used to determine if a wetland is "significant."

**Table 2
City of Springfield Wetlands—Willamette River Basin Wetlands**

Site Number	OFWAM Significance	Acres	USFWS Classification(s)	"Other" Created Waters (Acres)
W1*		4.14	RLP	
W2	Locally Significant Wetlands, Special Interest for Protection	0.90	PEM	
W3		1.27	PFO/PEM/POW	
W4	Locally Significant Wetlands	0.97	PFO/PEM	
W5		5.6	POW/PFO/PEM	
W6		5.63	PFO	
W7*		0	POW	36.02
W8*		1.22	POW	
W9		0.22	PEM	
W11		0.67	PSS	
W12	Locally Significant Wetlands	1.42	PFO	
W10		2.25	PSS	
W13		2.24	PFO	
W14		0.97	PEM	
W15		0.79	PFO	
W16	Locally Significant Wetlands	1.46	PFO	
W17		17.21	RLP	
W18 A-C	Locally Significant Wetlands	131.99	PEM/PFO	
**W 19	Locally Significant Wetlands	41.65	POW/PFO	
W 20	Locally Significant Wetlands	5.73	PSS/PUB	
W 21	Locally Significant Wetlands	4.47	PSS	
W 22	Locally Significant Wetlands	2.53	PFO	
W 23	Locally Significant Wetlands	8.7	PEM	
W 24	Locally Significant Wetlands	5.51	PFO	
W 25		4.31	PFO	
W 26		8.6	PEM	
	Total	188.99		36.02
		213.88		

*denotes off-site wetland determination and mapping

**denotes off-site wetland determination and mapping. W 19, W 20, W 21, W 22, W 23, W 24, W 25, W 26 are the revised resource sites in the Willamette River Basin area.

**Table 3
City of Springfield Wetlands—Total Acreage**

	Jurisdictional Wetlands	“Other” Created Waters
McKenzie Basin	214.27	151.48
Willamette Basin	189.99	36.02
Total Acres	404.13	187.50

Exhibit B: Springfield Inventory of Natural Resource Sites
Strikeout text is removed. Shaded text is added.

[Insert at pg. 18]

Site: ~~_____~~ E39 (Glenwood Slough)

Type: ~~_____~~ Riparian

Acres: ~~_____~~ 23.8

WHA score: ~~46-47~~

WHA source: Ester Lev, 1990

Area map(s): ~~5~~

Description: ~~Site E39 consists of several sloughs, wetlands, and riparian strips near or adjacent to Interstate 5 and the Southern Pacific Railroad tracks in the Glenwood area. Vegetation includes willows (*Salix* spp.), black cottonwood (*Populus trichocarpa*), sedge (*Carex* spp.), rush (*Juncus* spp.), cattails (*Typha latifolia*), and reed canarygrass (*Phalaris arundinacea*). Interspersion with other natural areas is limited by I-5 and other adjacent roads, but the site's proximity to the Willamette River may increase the number of wildlife species in the area. The Division of State Lands has determined that a portion of this site is a regulated wetland.~~

Site: S25 (Formerly E39)

Type: Riparian

Acres: 12.3

WHA score: 46-47

WHA source: Ester Lev, 1990

Area map(s): 6,7

Description: Site S-25 (formerly E-39) consists of segments of the Glenwood Slough near or adjacent to Interstate 5, Franklin Boulevard, Glenwood Boulevard and the Union Pacific Railroad tracks in the Glenwood area. S-25 is generally surrounded by industrial uses, railroad tracks and a highway.

The western portion of S-25 wraps around the Glenwood solid waste transfer station. At its west end, the slough passes under the Willamette River I-5 overpass. This western portion has been channelized with cement sides.

The portions of S-25 on either side of Glenwood Boulevard are more natural and contain significant riparian vegetation including willows (*Salix* spp.), black cottonwood (*Populus trichocarpa*), sedge (*Carex* spp.), rush (*Juncus* spp.), cattails (*Typha latifolia*), and reed canarygrass (*Phalaris arundinacea*). Interspersion with other natural areas is limited by I-5 and other adjacent roads, but S-25's proximity to the Willamette River may increase the number of

wildlife species in the area. The Division of State Lands has determined that portions of this site are regulated wetlands (W-20, W-21, and W-22).

The dominant riparian tree species include Oregon Ash, Sitka Willow, Red-Osier Dogwood, Black Cottonwood, Black Locust and Oregon Maple.

No fish survey was conducted for S-25 and it is not shown on ODFW maps of fish-bearing streams. The proximity and open connectivity to the Willamette River also suggests that fish are present in the Slough.

Site: S26

Type: Riparian

Acres: 1.56

WHA score: 17-57

WHA source: Washburn

Area map(s): 6, 7

Description: Site S-26 is a perennial stream that varies in width between 2-5 feet. It is bordered to the west by I-5. Much of the stream and the defined impact area are located within ODOT right-of-way adjacent to I-5 and beneath the Willamette I-5 Bridge. S-26 is segmented, with a 462-foot culvert dividing the northern and southern segments of the stream. The northern segment of S-26 daylights under the Willamette I-5 Bridge before continuing north to the Willamette River.

The dominant riparian tree species include Oregon Ash, Sitka Willow, Red-Osier Dogwood, Black Cottonwood, Black Locust, Oregon Maple, and Pacific Willow.

No known fish survey was been conducted for S-26. The stream is not shown on ODFW maps of fish-bearing streams. There is an unnamed perennial drainage that begins on the west side of I-5 (in Eugene) and is culverted under the freeway where it converges with the culverted portion of S-26. The Eugene drainage that connects to S-26 has been documented by ODFW as having cutthroat trout. The presence of cutthroat in the Eugene drainage suggests that S-26 is also fish-bearing. The proximity and connectivity to the Willamette River also suggests that fish are present in S-26.

Site: S27

Type: Riparian

Acres: .33

WHA score: 45

WHA source: Washburn

Area map(s): 6,7

Description: Site S-27 is a perennial stream segment that conveys water from the Moon Mt. area south of I-5. The stream is largely culverted from I-5 to the Glenwood slough, with

occasional daylighting along the watercourse. S-27 is one of those daylighted segments which opens into a 40 foot wide riparian feature. The stream segment is about 274 feet in length and is bounded to the north and west by industrial and residential development. Some land to the south and east is undeveloped, but the stream is culverted as it passes beneath that area.

S-27 is a dense thicket, dominated by Pacific Willow, Black Cottonwood, Maple species, Alder species, and Hazelnut trees. At the time the stream was assessed (July 2009) the feature was sufficiently shrouded by vegetation that the consultants noted that they "could not see the bottom of the drainage due to a steep slope and Salix sp. thicket."

No known fish survey was been conducted for S-27. It is not shown on ODFW maps of fish-bearing streams. The distance and lack of open connection to the Glenwood Slough and the Willamette River argue against this being classified as a fish-bearing stream.

Site: S28

Type: Riparian

Acres: .73

WHA score: 61

WHA source: Washburn

Area map(s): 6, 7

Description: S-28 is a narrow stream that meanders through a wetland area that is vegetated by willow thickets and Reed Canary grass. It is sandwiched between the ODOT right-of-ways for the I-5 and McVay Hwy. The system is fed by a storm culvert from under the freeway and exits through a storm culvert under McVay Hwy. and into the Willamette River.

The dominant riparian tree species include Oregon Ash, Douglas Fir, Red-Osier Dogwood, Black Cottonwood, Indian Plum, White Oak, and Oregon Maple.

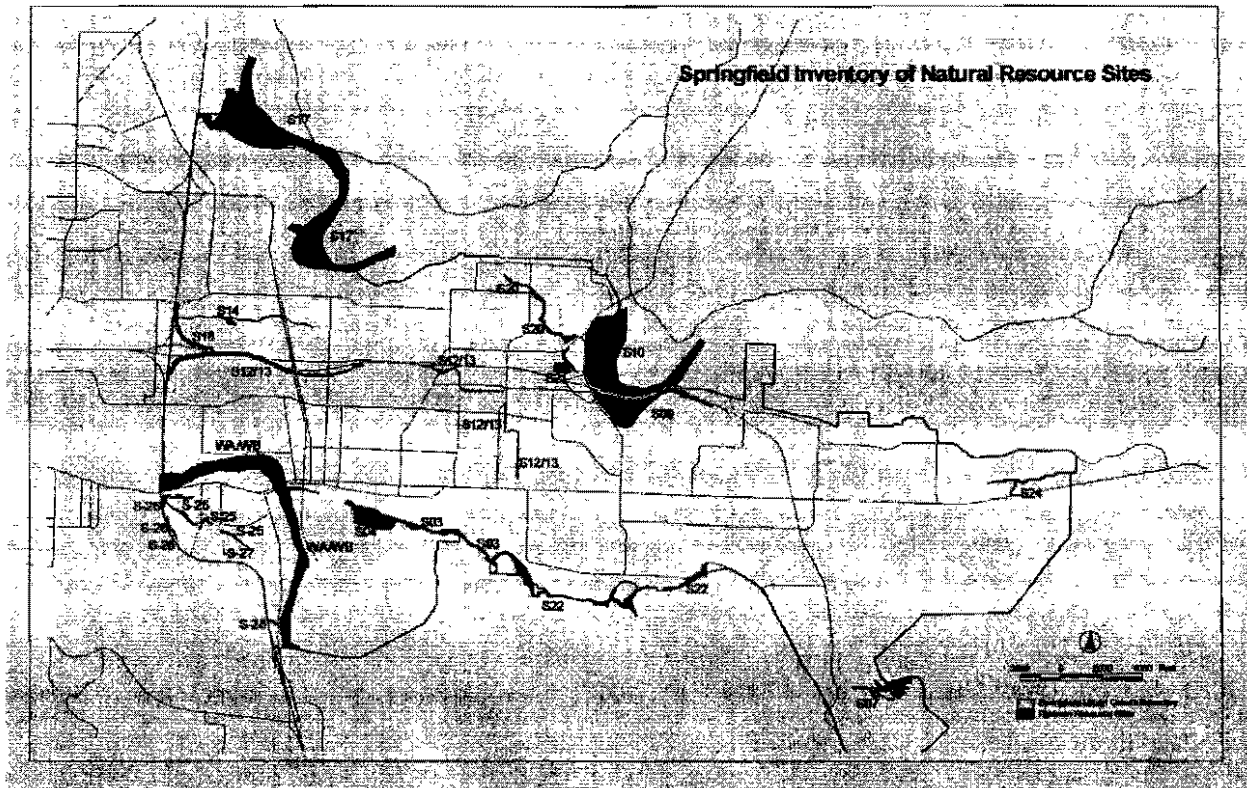


Exhibit C: Page Inserts for the Springfield Natural Resources Study

Table 3-1. Springfield Inventory of Natural Resource Sites [Insert at pg. 22]

Site #	Acres	Tier 1 Significance Criteria Met	Tier 2 WHA Score	Quality Ranking	Site Name
S03 ¹	29.7	1,2,3,4	61-62	High	Mill Race A (Rural)
S04	42.9	2,3,4,6	40-41	Moderate	Mill Race B (Urban)
S07	23.9	1,2	34	Moderate	Brand S/Natron
S09	71.9	1,2,4	50	High	Weyerhaeuser B
S10 ¹	195.0	1,4,6	70	High	Weyerhaeuser A
S12/13	39.1	2,4	45 (Trees) 36 (No Trees)	High Moderate	Q Street Ditch
S14	2.4	2,4	35	Moderate	Guy Lee
S17 ¹	347.2	1,2,4,6	67	High	Maple Island Slough/ McKenzie River
S18	13.4	2,4	22-23	Moderate	SCS Channel #6
S20	19.6	1,2,4	67	High	Irving Slough North
S21	13.7	1,2,4	47	High	South Irvine Slough and Pond
S22 ¹	44.9	1,2,4	67	High	Jasper Road Slough
S24	8.0	2,3,4	55	High	Gray Creek
WA/WB	628.2	1,2,3,4,6	72-74 (Natural) 64-66 (Urban)	High	Willamette River
E39	23.8	1,4,5	46-47	High	Glenwood Slough
S25	12.30	1,4,5	46-47	High	Glenwood Slough
S26	1.56	1,4	17-57	High	Riverview/Augusta Channel
S27	.33	4	45	High	Petersen Equipment Daylighted Culvert
S28	.73	1,4	61	High	S. McVay Hwy. Channel
Total	1518.62				

4.4 Springfield's Locally Significant Wetlands [Insert at pg. 26]

McKenzie River Basin Wetlands

Site Number	OFWAM Significance Rationale	Acres	USFWS Classification(s)
M4	Special Interest for Protection: Wetland inhabited by a species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	5.02	PEM
M5	Provides diverse wildlife habitat and hydrologic control function is intact.	9.00	PFO/PSS/PEM
M14	Provides diverse wildlife habitat.	33.45	PEM/PFO
M16a-c	M16a: Water quality and hydrologic functions are intact. M16b: Hydrologic function is intact. M16c: Hydrologic Function is intact	13.96	PFO/POW/RLP/PEM
M20	Provides diverse wildlife habitat and water quality is intact	0.52	RLP
M26	Provides diverse wildlife habitat; provides recreational and educational opportunities;	1.85	PFO/PEM/PSS
M28	Special Interest for Protection- Mitigation Site	1.51	PEM
M29	Special Interest for Protection- Wetland inhabited by a species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	1.08	PFO/PEM
M30	Water quality function is intact	6.49	PFO/PEM/POW
M33a	Hydrologic control function is intact	3.39	PEM
McKenzie Basin Acres		76.27	

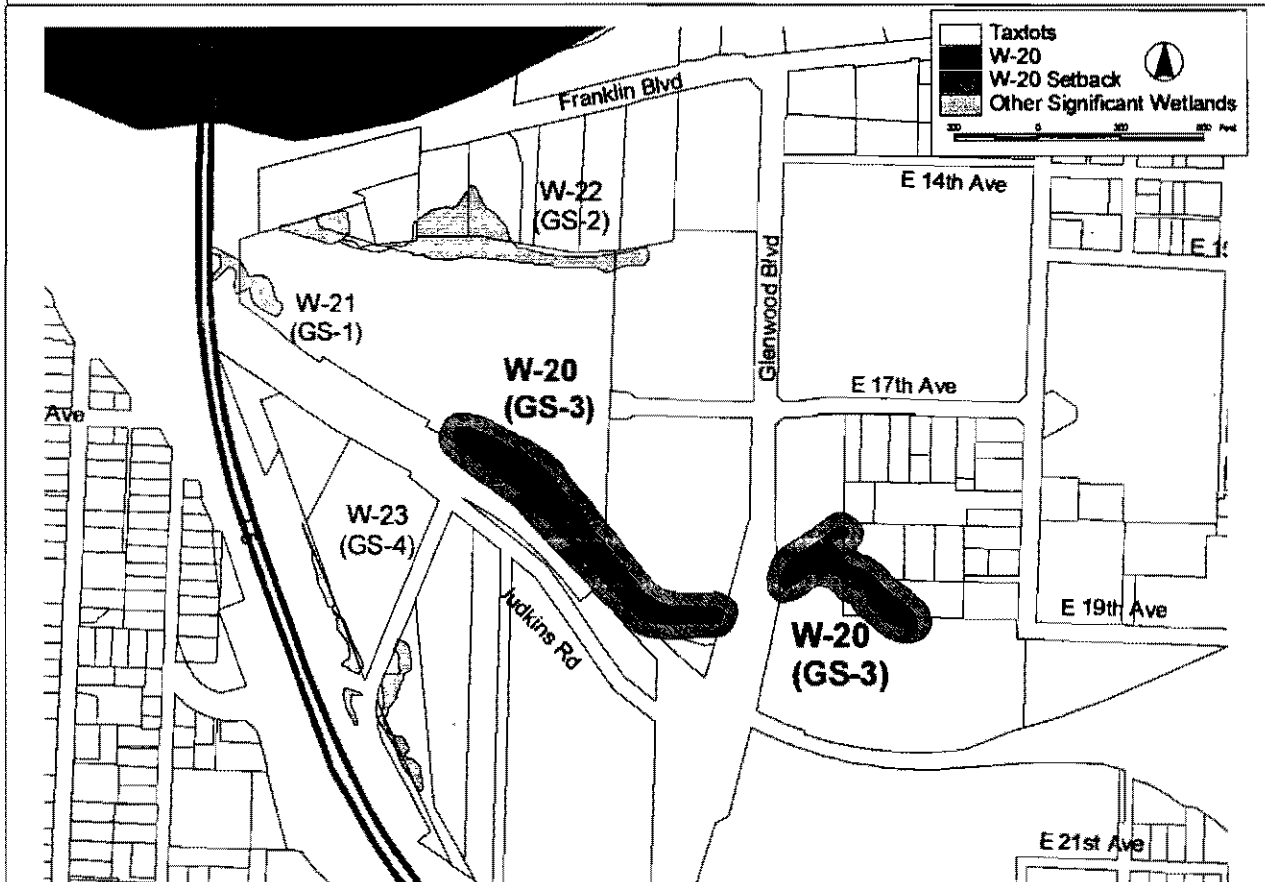
Willamette River Basin Wetlands

Site Number	OFWAM Significance	Acres	USFWS Classification(s)
W2	Special Interest for Protection -Wetland inhabited by a species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered.	0.90	PEM
W3a	Water quality function is intact	15.30	RLP
W4a	Water quality function is intact	.67	PFO
W12	Water quality and hydrologic functions are intact	1.42	PFO
W16	Water quality and hydrologic functions are intact	1.46	PFO/PEM
W18a	Water quality and hydrologic functions are intact	128.80	PEM/PFO
W19	Hydrologic control function is intact	41.65	POW/PFO
W20	Water quality and hydrologic functions are intact	3.39	PSS/PAB
W20	Water quality and hydrologic functions are degraded	3.73	PSS/PUB
W21	Water quality and hydrologic functions are degraded	.47	PSS
W22	Water quality and hydrologic functions are degraded	2.53	PFO
W23	Water quality and hydrologic functions are degraded	.87	PEM
W24	Water quality and hydrologic functions are degraded	.51	PFO
Willamette Basin Acres		201.7	
Total acreage for all Locally Significant Wetlands		277.97	

[Insert W-20 through W-24 at pg. 190]

Site: W-20 (GS-3)	Acres: 3.73	OFWAM: Locally Significant	Associated Inventoried Riparian Resource?
	Cowardin Class: Palustrine Scrub-Shrub (PSS), Wetland with <30% canopy cover of shrubs or small trees Palustrine Unconsolidated Bottom (PUB) Wetland with <30% vegetation cover and a surface with >25% of the particles smaller than stones.	Wetland is within ¼ mile of DEQ 303 (d) listed water body Wetland has a direct surface water connection to a salmonid stream Moderate Quality Wetlands	Yes: S-25 WHA Score: 46-47 High Quality Resource

Goal 5 Recommendation: Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-20 is associated with the Glenwood Slough (S-25, formerly E-39). The Slough is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the Slough also protects W-20. Any portion of W-20 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under the provisions of SDC 4.3-117.



Description:

W-20 is a Palustrine Shrub-Scrub wetland. It is part of a system known as the Glenwood Slough. It flows northwest into W-21 prior to being culverted and flowing into the Willamette River. W-20 is bisected by Glenwood Blvd, but is still hydrologically connected by a culvert. The Slough is a topographic bowl. Hydrologic sources include stormwater from adjacent impervious surfaces, in addition to groundwater and upslope surface water. A portion of W-20 was previously delineated (WD96-0375).

Dominant Wetland Vegetation			
Trees/ Shrubs		Vines/ Herbs	
<i>Fraxinus latifolia</i>	Oregon Ash	<i>Mentha arvensis</i>	Field mint
<i>Salix sitchensis</i>	Sitka Willow	<i>Biden sp.</i>	Begger's tick.
<i>Cornus stolonifera</i>	Red-Osier Dogwood	<i>Juncus effusus</i>	Soft Rush
		<i>Carex leptopoda</i>	Short-Scale Sedge

Adjacent upland species: *Symphoricarpos albus*, *Rubus discolor*, *Cornus stolonifera*, *Rubus ursinus*, *Corylus cornuta*, *Fraxinus latifolia*, *Carex leptopoda*, *Dipsacus sylverstris*, *Tolmiea menziesii*

Soils—Mapped Series	Chehalis silty clay loam
Hydrologic Source	Groundwater

Wetland and Impact Area Summary

Wetland Acreage	3.73
Impact Area Acreage	11.74
Combined Wetland and Impact Area	15.50
Vacant Acres within the Combined Area	3.73
Number of Parcels Affected	14
Combined Parcel Acreage	51.26

Conflicting Uses by Acre and Zoning District

SITE ID	LDR	PLO	LMI	TOTAL ACRES
W-20	.11	0	2.88	*2.99
W-20 Impact Area	1.07	.89	9.78	11.74
Total	1.18	.92	12.66	14.73

*This number varies from the total wetland acreage since portions of the wetland and its impact area are within railroad and street right-of-way which have no zoning.

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LDR	PLO	LMI	TOTAL ACRES
W-20	0	0	.13	.13
W-20 Impact Area	0	.89	2.71	3.60
Total	0	.89	2.84	3.73

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? **Yes.**

W-20 is associated with the Glenwood Slough (S-25, formerly E-39). The Slough is a tributary to a water quality limited watercourse (Willamette River) and is protected by a 50-foot setback and a site plan review requirement.

The Glenwood Refinement Plan includes policies that give direction for environmental design affecting S-25 (formerly E-39). The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for W-20

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

W-20 is rated as a "Moderate Quality Wetland." The wetland overlaps with a riparian resource site, S-25. S-25 is rated as a "High Quality Resource" site with a WHA score of 46-47. The OFWAM analysis concluded that the wetland's water quality and hydrologic control functions are impacted or degraded. The resource provides habitat for some species, although the fish habitat is degraded. Fully allowing conflicting uses would mean the loss of what little function and habitat that W-20 does provide.

Social Consequences

The OFWAM analysis indicates that W-20 is not aesthetically pleasing, nor is it appropriate for educational or recreational uses. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. The site has moderate potential for enhancement which may make it more of a community amenity.

Economic Consequences

The OFWAM analysis indicates that the water quality and hydrologic control functions of the resource are already degraded. These functions could be mimicked using engineered facilities at a significant cost. Fully protecting the resource site would mean the loss of 3.73 acres of vacant industrial land within the combined wetland and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-20 is associated with the Glenwood Slough (S-25, formerly E39). The slough is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects W-20. Any portion of W-20 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under provisions of SDC Section 4.3-117.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	PLO	LMI	TOTAL ACRES
W-20	0	.13	.13
W-20 50-ft. Setback	.03	.67	.70
Total	.03	.80	.83

About .13 acres of W-20 is classified as vacant by the Lane County Assessor's Office. The vacant acreage includes portions of 1 lot. Limiting conflicting uses would allow some development to occur within the wetland area where the developer could show how the essential functions of the wetland could be preserved or enhanced. A 50-foot development setback is already required for the wetland under Section 4.3-115 of the Springfield Development Code. No additional setback is proposed.

A 50-foot setback would affect .67 acres of vacant industrial land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other open space are within the setback. Stormwater management facilities required for development can be placed within the setback under SDC 4.3-115.

Employing low impact development practices within 150 feet of the wetland could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in SDC 4.3-115.

Reduction in the Buildable Land Inventory:

The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as “Vacant,” or “Redevelopable.” These classifications are not the same used by the Lane County Assessor’s Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Protecting W-20 and its 50-foot setback area from future development effectively reduces the CIBL inventory by a total of .73 acres and the RLS by a total of .44 acres, for a total of 1.17 acres.

**Impact of Recommended Protection on
Commercial, Industrial and Residential Land Inventories**

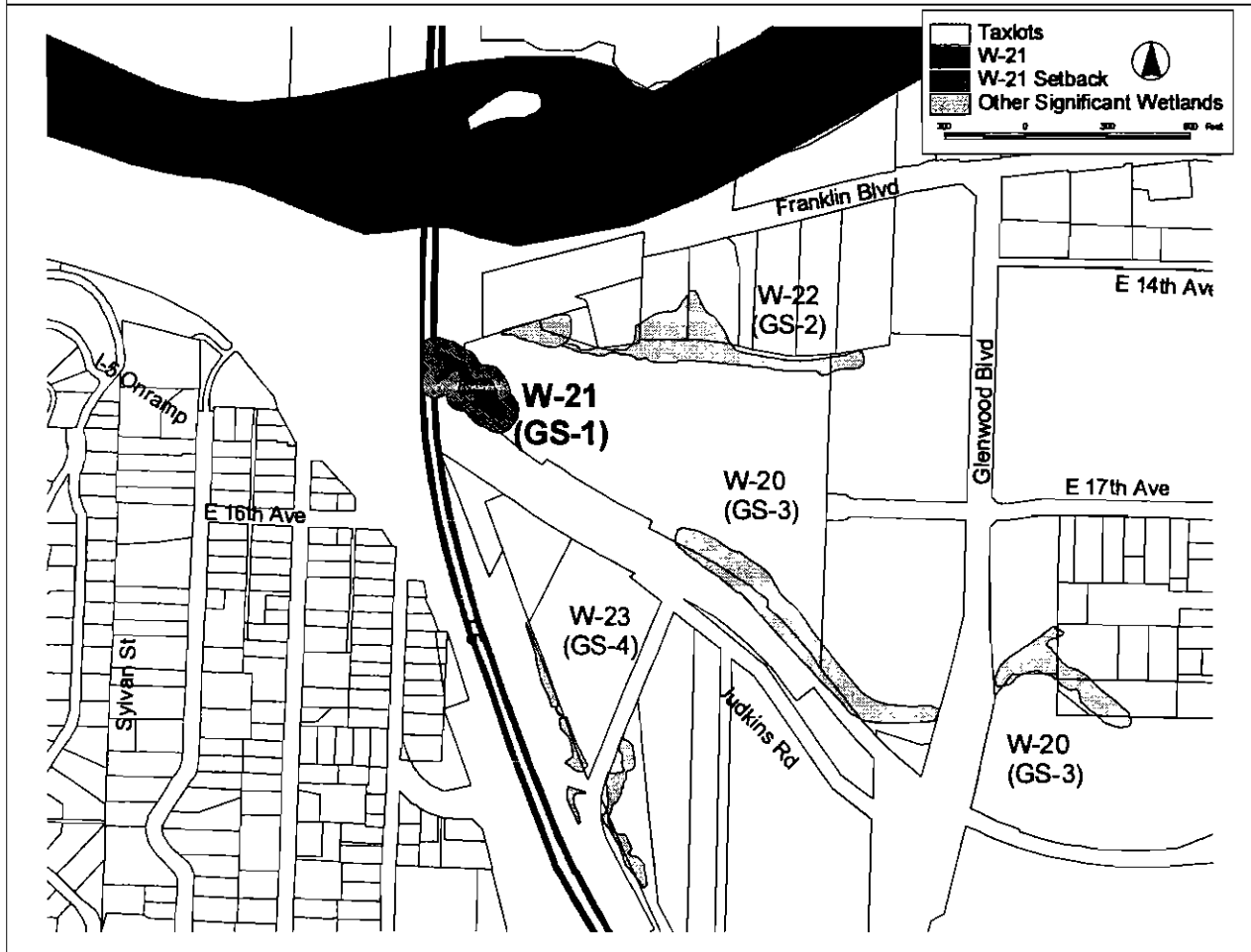
Site W-20 Zoning	Redevelopable	Vacant	Total Acres
LDR	.44	0	.44
LMI	.71	.02	.73
Total Acres	1.15	.02	1.17

The cumulative effect of fully protecting all commercial and industrial lands that are impacted by riparian or wetland resources could increase the need for UGB expansion to meet land needs.

A 50-foot development setback is required under stormwater provisions of the Springfield Development Code, and thus the 1.17 impact of protecting W-20 with the setback is not attributed to this report.

Site: W-21 (GS-1)	Acres: .47	OFWAM: Locally Significant	Associated Inventoried Riparian Resource?
	Cowardin Class: Palustrine Scrub Shrub (PSS) Wetland with <30% canopy cover of shrubs or small trees.	Wetland is within ¼ mile of DEQ 303 (d) listed water body Wetland has a direct surface water connection to a salmonid stream Moderate Quality Wetlands	Yes: S-25 WHA Score: 46-47 High Quality Resource

Goal 5 Recommendation: Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-21 is associated with the Glenwood Slough (S-25). The slough is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects W-21. Any portion of W-21 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under the provisions of SDC 4.3-117.



Description:

Wetland W-21 is .47 acres and classified as a Palustrine Shrub-Scrub (PSS) wetland. The wetland is located under and east of the Interstate 5 Bridge just south of Franklin Blvd. W-21 was delineated in 2003 (WD2003-0273) as part of the ODOT's I-5 bridge project and Willamette River trail. The west portion was impacted by construction of the I-5 temporary detour bridge. W-21 is bounded to the south by railroad tracks. Glenwood Slough flows through the wetland as do several channels used to convey stormwater. The wetland is less than one-half acre and is a judged locally significant wetland because of its hydrologic connection to the Willamette River. It is also connected to W22 and W23.

Dominant Wetland Vegetation			
Trees/ Shrubs		Vines/ Herbs	
<i>Fraxinus latifolia</i>	Oregon Ash	<i>Carex obnupta</i>	Slough Sedge
<i>Populus trichocarpa</i>	Black Cottonwood	<i>Ranunculus repens</i>	Creeping Butter-Cup
<i>Cornus stolonifera</i>	Red-Osier Dogwood		
<i>Salix lasiandra</i>	Pacific Willow		

Adjacent upland species: *Populus trichocarpa*, *Alnus rubra*, *Fraxinus latifolia*, *Cornus stolonifera*, *Robinia pseudoacacia*, *Rubus discolor*, *Cytisus scoparius*, *Festuca arundinacae*, *Plantago lanceolata*, *Lathyrus latifolius*, *Daucus carota*, *Cirsium arvense*, *Dipsacus sylvestris*, unidentified mixed grasses

Soils—Mapped Series	Chehalis silty clay loam, Pengra-Urban land complex
Hydrologic Source	Groundwater

Wetland and Impact Area Summary

Wetland Acreage	.47
Impact Area Acreage	4.54
Combined Wetland and Impact Area	5.01
Vacant Acres within the Combined Area	0
Parcels Affected (Including Impact Area)	2
Combined Parcel Acreage	43.54

Conflicting Uses by Acre and Zoning District

SITE ID	LMI	TOTAL ACRES
W-21	.31	*.31
W-21 Impact Area	4.54	4.54
Total	4.85	4.85

*Portions of the wetland fall within right-of-way which has no zoning designation; thus this figure is less than that shown above for wetland acreage.

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LM	TOTAL ACRES
W-21	0	0*
W-21 Impact Area	0	0*
Total	0	0*

*W-21 lies within County owned land that has been developed as a Solid Waste Transfer Site. The wetland is located within ODOT and Union Pacific right-of-way that bisects the County property. What appears to be vacant resource land within the County parcel is in fact committed for transportation uses.

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? **Yes.**

W-21 is associated with the Glenwood Slough. The Slough is a tributary to a water quality limited watercourse (Willamette River) and is protected by a 50-foot setback and a site plan review requirement. This 50-foot setback also protects W-21. Any portion of W-21 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under provisions of SDC Section 4.3-117.

The Glenwood Refinement Plan includes policies that give direction for environmental design affecting S-25 (formerly E-39). The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for W-21

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

W-21 is rated as a "Medium Quality Wetlands." The wetland overlaps with a riparian resource site, E-39. E-39 is rated as a "High Quality Resource" site with a WHA score of 46-47. The OFWAM analysis indicates that the wetland's water quality and hydrologic control functions are degraded. The resource provides habitat for some species, although the fish habitat is degraded. Fully allowing conflicting uses would mean the loss of what little function and habitat that W-21 does provide.

Social Consequences

The OFWAM analysis concluded that W-21 is not aesthetically pleasing, nor is it appropriate for educational or recreational uses. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. The site has high potential for enhancement which may make it more of a community amenity.

Economic Consequences

The OFWAM analysis indicates that the water quality and hydrologic control functions of the resource are already degraded. These functions could be mimicked using engineered facilities, but at a significant cost. Portions of the affected tax lot have been developed as Lane County's Glenwood Solid Waste Transfer Site. The wetland itself is located beneath the Willamette River I-5 Bridge and adjacent to the Union Pacific Railway right-of-way. Fully protecting the resource site would mean no loss to the remaining vacant industrial land within the combined wetland and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-21 is associated with the Glenwood Slough. The slough is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects W-21. Any portion of W-21 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under provisions of SDC Section 4.3-117.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	LMI	TOTAL ACRES
W-21	0	0
W-21 50-ft. Setback	0	0
Total	0	0

The land containing W-21 is not classified as vacant by the Lane County Assessor's Office. Limiting conflicting uses would allow some re-development to occur within the wetland area where the developer could show how the essential functions of the wetland could be preserved or enhanced. A 50-foot development setback is already required for the wetland under SDC Section 4.3-115. This 50-foot setback protecting the slough also protects W-21. Any portion of W-21 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback.

A 50-foot setback would not affect any vacant industrial land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other open space are within the setback. Stormwater management facilities required for development can be placed within the setback under SDC Section 4.3-115.

Employing low impact development practices within 150 feet of the wetland could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in SDC Section 4.3-115.

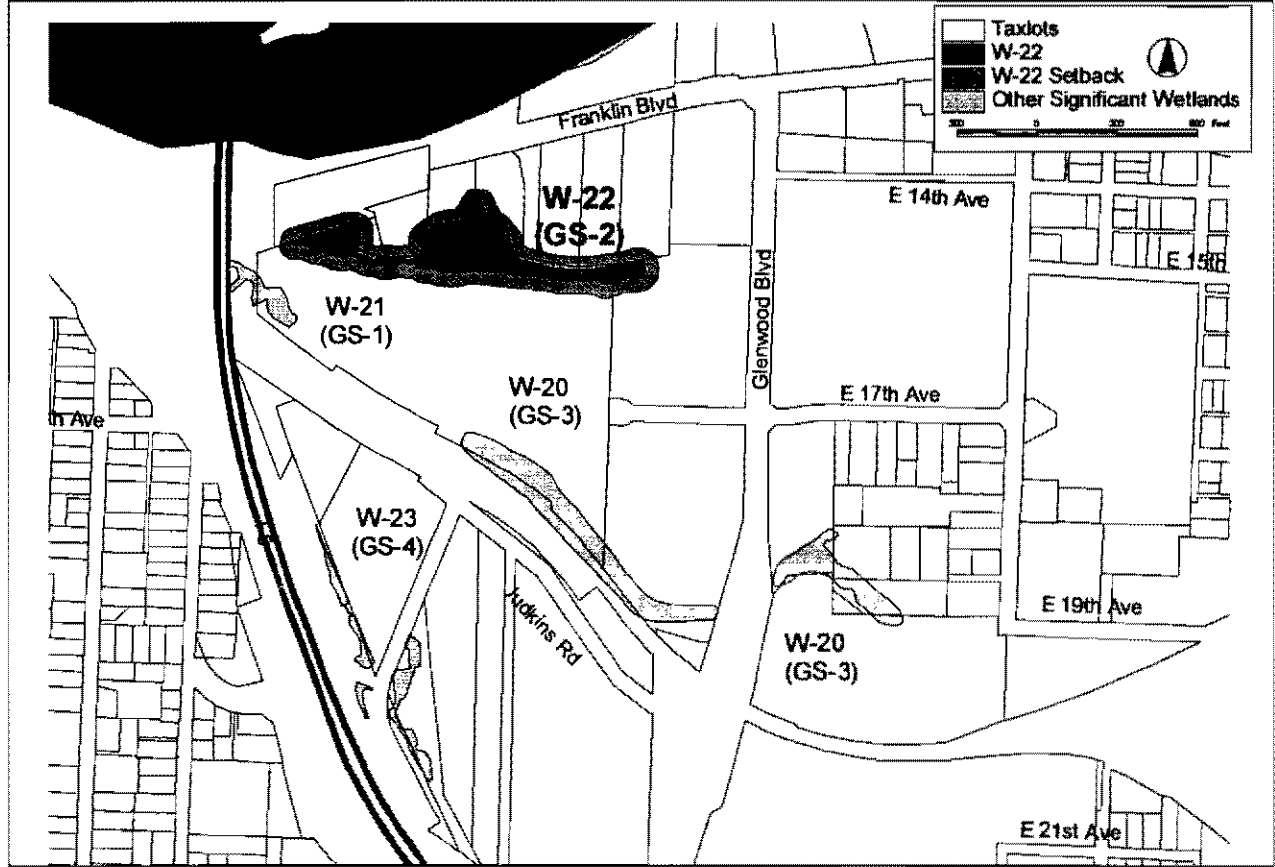
Reduction in the Buildable Land Inventory:

The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as “Vacant,” or “Redevelopable.” These classifications are not the same used by the Lane County Assessor’s Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Neither the CIBL nor the RLS showed W-21 or its setbacks as inventoried land. Protecting W-21 will not cause a reduction in those inventories.

Site: W-22 (GS-2)	Acres: 2.53	OFWAM: Locally Significant	Inventoried Riparian Resource?
	Cowardin Class: Palustrine Forested (PFO) Wetland with trees growing in standing water or saturated soils, or small wetlands entirely beneath an overhanging forest canopy.	Wetland is within ¼ mile of DEQ 303 (d) listed water body Wetland has a direct surface water connection to a salmonid stream Moderate Quality Wetlands	Yes: S-25 WHA Score: 46-47 High Quality Resource

Goal 5 Recommendation: Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-22 is associated with the Glenwood Slough (S-25). The slough is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects W-22. Any portion of W-22 not protected by the Glenwood Slough 50-foot setback should be protected by a 25-foot setback under the provisions of SDC 4.3-117.



Description:

Wetland W-22 is 2.53 acres and is classified as a Palustrine Forested wetlands (PFO). W-22 is a PFO system located with a drainage that flows through the southern portion. Portions of the wetland have been previously delineated (WD's 03-0273, 00-0102, 98-0051). PHS did not have access to the easternmost and southern portions of W-22 and boundaries were determined through off-site observations, previous delineations, and aerial photography.

Dominant Wetland Vegetation			
Trees/ Shrubs		Vines/ Herbs	
<i>Fraxinus latifolia</i>	Oregon Ash	<i>Carex obnupta</i>	Slough Sedge
<i>Populus trichocarpa</i>	Black Cottonwood	<i>Biden sp.</i>	Begger's tick.
<i>Cornus stolonifera</i>	Red-Osier Dogwood	<i>Juncus effusus</i>	Soft Rush
<i>Salix lasiandra</i>	Pacific Willow	<i>Lapsana communis</i>	Nipplewort
<i>Alnus Ruba</i>	Red Alder		
<i>Rosa piscocarpa</i>	Clustered Wild Rose		

Adjacent upland species: *Acer macrophyllum*, *Fraxinus latifolia*, *Populus trichocarpa*, *Rubus discolor*, *Symphoricarpos alba*, *Corylus cornuta*, *Cytisus scoparium*, *Holodiscus discolor*, *Hypericum perforatum*, *Festuca arundinacea*, mowed unidentified grasses

Soils—Mapped Series	Chehalis silty clay loam
Hydrologic Source	Groundwater

Wetland and Impact Area Summary

Wetland Acreage	2.53
Impact Area Acreage	12.22
Combined Wetland and Impact Area	14.75
Vacant Acres within the Combined Area	2.84
Parcels Affected (Including Impact Area)	12
Combined Parcel Acreage	67.43

Conflicting Uses by Acre and Zoning District

SITE ID	LMI	TOTAL ACRES
W-22	2.53	2.53
W-22 Impact Area	12.22	12.22
Total	14.75	14.75

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LM	TOTAL ACRES
W-22	.56	.56
W-22 Impact Area	2.28	2.28
Total	2.84	2.84

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? **Yes.**

W-22 is associated with the Glenwood Slough-North Channel (S-25). The channel is a tributary to a water quality limited watercourse (Willamette River) and is protected by a 50-foot setback and a site plan review requirement.

The Glenwood Refinement Plan includes policies that give direction for environmental design affecting S-25 (formerly E-39). The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for W-22

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

W-22 is rated as a "Moderate Quality Wetland." The wetland overlaps with a riparian resource site, S-25. S-25 is rated as a "High Quality Resource" site with a WHA score of 46-47. The OFWAM analysis concluded that W-22's water quality and hydrologic control functions are impacted or degraded. The resource provides habitat for some wildlife species, although the fish habitat is degraded. Fully allowing conflicting uses would mean the loss of what little function and habitat that W-22 provides.

Social Consequences

The OFWAM analysis indicates that W-22 is not aesthetically pleasing, nor is it appropriate for educational or recreational uses. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. The site has moderate potential for enhancement which may make it more of a community amenity.

Economic Consequences

The OFWAM analysis indicates that the water quality and hydrologic control functions of the resource are already degraded. These functions could be mimicked using engineered facilities at a significant cost. Fully protecting the resource site would mean the loss of 2.84 acres of vacant industrial land within the combined wetland and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. W-22 is associated with the Glenwood Slough-North Channel (S-25, formerly E39). The channel is protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the channel also protects W-22.

A small portion of W-22 (about .06 acres) is not protected by the 50-ft setback provided by the stormwater WQLW standards found in SDC Section 4.3-115. This unprotected segment of W-22 should be covered by a 25-foot development setback and the protections afforded by SDC Section 4.3-117. Any portion of W-22 not protected by the Glenwood Slough-North Channel 50-foot setback should be protected by a 25-foot setback.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	LMI	TOTAL ACRES
W-22	.56	.56
W-22 25 to 50-ft. Setback	.79	.79
Total	1.35	1.35

About .56 acres of W-22 is classified as vacant by the Lane County Assessor's Office. The vacant acreage includes portions of 3 lots. Limiting conflicting uses would allow some development to occur within the wetland area where the developer could show how the essential functions of the wetland could be preserved or enhanced. A 50-foot development setback is already required for the wetland under SDC Section 4.3-115. A small portion of W-22 (about .05 vacant acres) is not protected by the 50-ft setback, but is protected by a 25-foot setback under the provisions of SDC Section 4.3-117. A 25-foot setback applied to the unprotected wetland area affects about .09 acres of the total setback acres shown for W-22.

A 25 to 50-foot setback would affect .79 acres of vacant industrial land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other

open space are within the setback. Stormwater management facilities required for development can be placed within the setback under SDC Section 4.3-115.

Employing low impact development practices within 150 feet of the wetland could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in SDC Section 4.3-115.

Reduction in the Buildable Land Inventory:

The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as “Vacant,” or “Redevelopable.” These classifications are not the same used by the Lane County Assessor’s Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Protecting W-22 and its 25-50 foot setback area from future development effectively reduces the CIBL inventory by a total of 2.26 acres.

**Impact of Recommended Protection on
Commercial, Industrial and Residential Land Inventories**

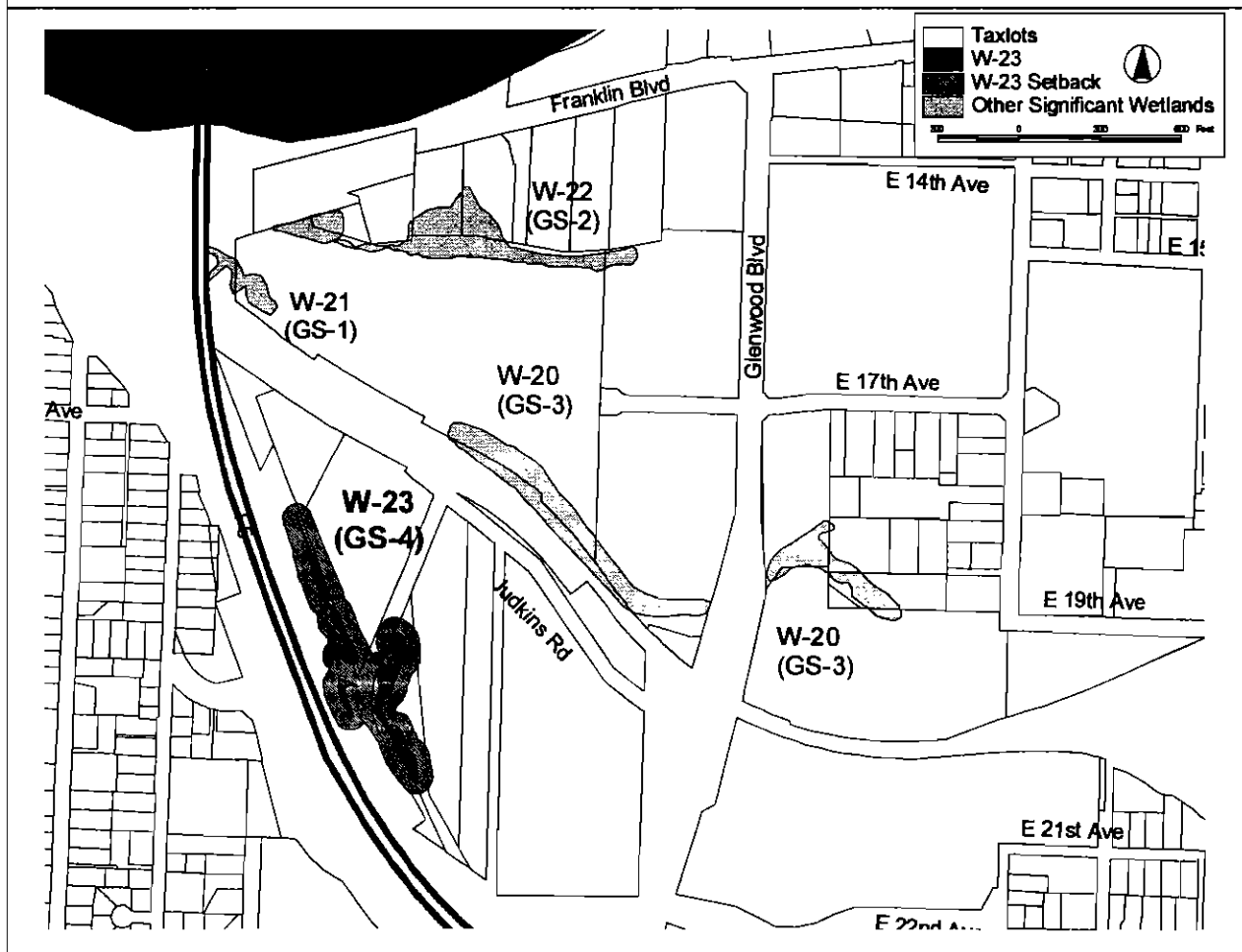
Site W-22 Zoning	Redevelopable	Vacant	Total Acres
LMI	.91	1.35	2.26
Total Acres	.91	1.35	2.26

The cumulative effect of fully protecting all commercial and industrial lands that are impacted by riparian or wetland resources could increase the need for UGB expansion to meet land needs.

A 50-foot development setback is already required under stormwater provisions of the Springfield Development Code, and thus the 2.26 acre impact of protecting W-22, including its setback, is not attributed to this report.

Site: W-23 (GS-4)	Acres: .87	OFWAM: Locally Significant Wetland is within ¼ mile of DEQ 303 (d) listed water body Moderate Quality Wetlands	Associated Inventoried Riparian Resource? Yes: S-26 WHA Score: 17-57 High Quality Resource Site
	Cowardin Class: Palustrine Emergent (PEM) Herbaceous plants growing in standing water or saturated soils.		

Goal 5 Recommendation: Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. Maintain an average 25-foot development setback from the wetland. The adjacent Riverview/Augusta Channel (S-26) is protected by a 50-foot development setback and site plan review standards described in Section 4.3-115 of the Springfield Development Code. Portions of this setback overlap with the recommended 25-foot setback for W-23. Any portion of W-23 not protected by the Riverview/Augusta Channel's 50-foot setback should be protected by a 25-foot setback under the provisions of SDC 4.3-117.



Description:

Wetland W-23 is .87 acres and classified as Palustrine Emergent (PEM) wetland. W-23 is a series of small PEM wetlands located within the ODOT ROW and on private property. The wetlands were delineated in 2007 for the I-5 bridge project (WD08-0140). The wetlands are located at the bottom of a steep slope. Hydrology from the wetlands flows into a channel that drains to the northwest into the Willamette River. The wetlands located in the ODOT ROW are mowed and maintained.

By state mandate, the Oregon Freshwater Wetland Assessment Methodology (OFWAM) is used to determine if a wetland is “locally significant” under Oregon law. W-23 fails all criteria for the significance test with the exception that portions of the wetland are within ¼ mile of a water body listed by DEQ as a water-quality limited water body, and the wetland has an impacted or degraded water quality function.

Dominant Wetland Vegetation

Trees/ Shrubs		Vines/ Herbs	
<i>Populus trichocarpa</i>	Black Cottonwood	<i>Mentha arvensis</i>	Wild mint
		<i>Biden sp.</i>	Begger’s tick.
		<i>Juncus effusus</i>	Soft Rush
		<i>Carex stipata</i>	Sawbeak Sedge
		<i>Bromus hordeaceus</i>	Soft Brome
		<i>Holcus Lanatus</i>	Common Velvet Grass
		<i>Plantago Lanceolata</i>	English Plantain
		<i>Festuca arundinacea</i>	Tall Fescue
		<i>Poa sp.</i>	Bluegrass species

Adjacent upland species: *Populus alba*, *Rubus discolor*, *Daucus carota*, *Cytisus scoparium*, *Vicia sp.*, *Festuca arundinacea*, *Taraxacum officinale*, *Trifolium pretense*

Soils

Soils—Mapped Series	Dixonville-Philomath-Hazclair Complex
Hydrologic Source	Groundwater

Wetland and Impact Area Summary

Wetland Acreage	.87
Impact Area Acreage	5.34
Combined Wetland and Impact Area	6.21
Vacant Acres within the Combined Area	2.05
Parcels Affected (Including Impact Area)	5
Combined Parcel Acreage	12.67

Conflicting Uses by Acre and Zoning District

SITE ID	LMI	TOTAL ACRES
W-23	.53	*.53
W-23 Impact Area	5.34	5.34
Total	5.87	5.87

*Portions of the wetland fall within right-of-way which has no zoning designation; thus this figure is less than that shown above for wetland acreage.

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LMI	TOTAL ACRES
W-23	.49	.49
W-23 Impact Area	1.56	1.56
Total	2.05	2.05

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? **Yes, in part. Portions of W-23 are not currently protected.**

W-23 is adjacent to, but a part of the Riverview/Augusta Channel (S-26). The Channel is a tributary to a water quality limited watercourse (Willamette River) and is protected by a 50-foot setback and by a site plan review requirement.

The Glenwood Refinement Plan includes policies that give direction for environmental design. The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for W-23

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

W-23 is rated as a "Moderate Quality Wetlands." The wetland's water quality and hydrologic control functions are impacted or degraded. The resource provides habitat for some species, but the OFWAM analysis concludes that it does not provide a diverse wildlife habitat. Fully

allowing conflicting uses would mean the loss of what little function and habitat that W-23 provides.

Social Consequences

W-23 is not aesthetically pleasing, nor is it appropriate for educational or recreational uses. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. The OFWAM analysis noted that the site is not appropriate for recreational use. The wetland does not have any point of access. The site has some potential for enhancement which may make improve its wetland function.

Economic Consequences

Fully allowing conflicting uses would mean the loss of the water quality and hydrologic control functions of the resource. These functions could be mimicked using engineered facilities at a significant cost. Fully protecting the resource site would mean the loss of 1.56 acres of vacant industrial land within the combined wetland and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses and employ low impact development practices when developing within 150 feet of the wetland. Maintain an average 25-foot development setback from the wetland. The adjacent Riverview/Augusta Channel is protected by a 50-foot development setback and site plan review standards described in Section 4.3-115 of the Springfield Development Code. Portions of this setback overlap the recommended 25-foot setback for W-23. Any portion of W-23 not protected by the Riverview/Augusta Channel 50-foot setback should be protected by a 25-foot setback.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	LMI	TOTAL ACRES
W-23	.49	.49
W-23 25-ft. Setback	.68	.68
Total	1.17	1.17

About .49 acres of W-23 is classified as vacant by the Lane County Assessor's Office. The vacant acreage includes portions of 2 lots. Limiting conflicting uses would allow some development to occur within the wetland area where the developer could show how the essential functions of the wetland could be preserved or enhanced.

A 25-foot setback would affect .68 acres of vacant industrial land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other open space are within the setback. Stormwater management facilities required for development can be placed within the setback under Section 4.3-115 of the Springfield Development Code.

Employing low impact development practices within 150 feet of the wetland could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in Section 4.3-115.

Reduction in the Buildable Land Inventory:

The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as “Vacant,” or “Redevelopable.” These classifications are not the same used by the Lane County Assessor’s Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Protecting W-23 and its 50-foot setback area from future development effectively reduces the CIBL inventory by a total of 1.02 acres.

Impact of Recommended Protection on Commercial, Industrial and Residential Land Inventories

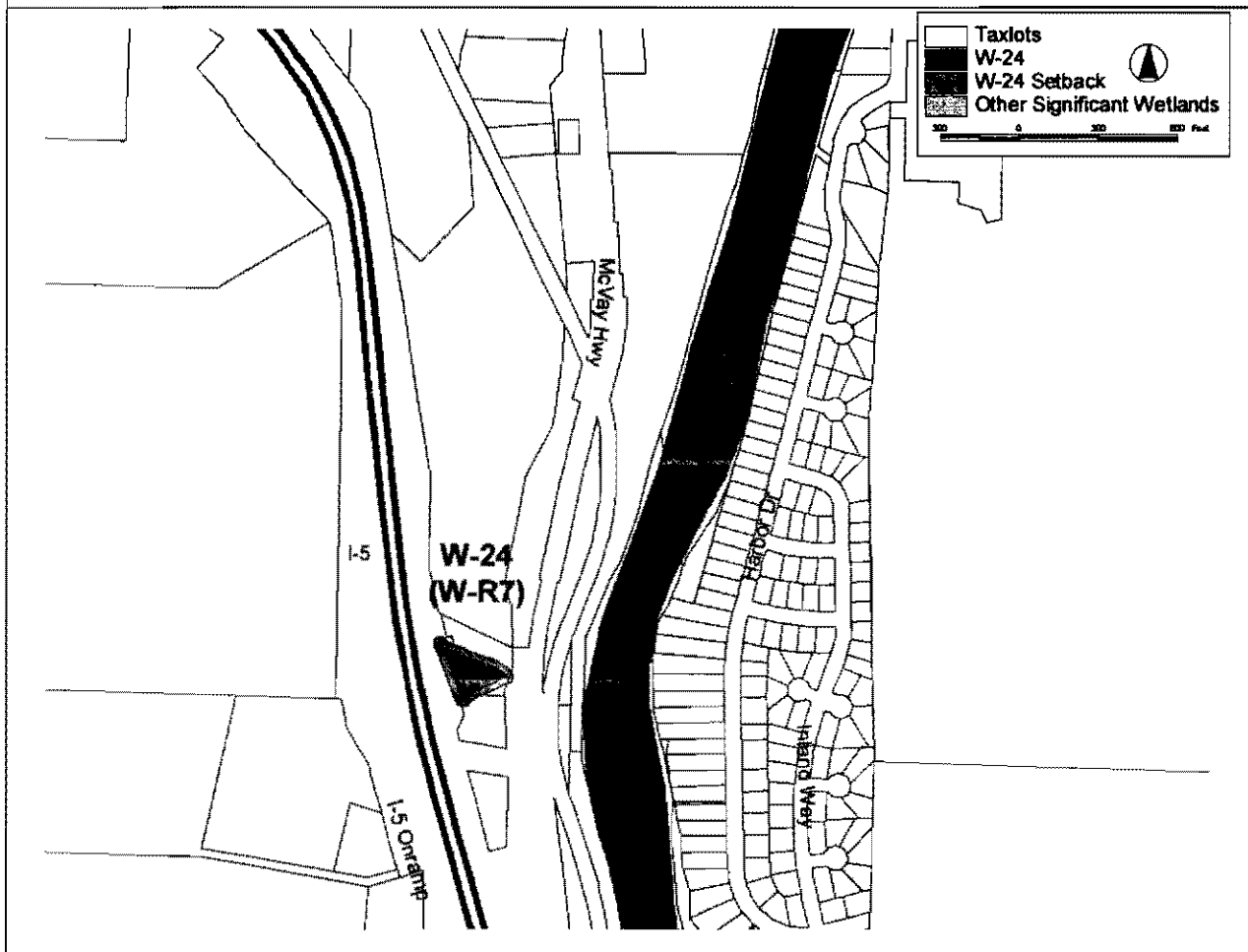
Site W-23 Zoning	Redevelopable	Vacant	Total Acres
LMI	.49	.53	1.02
Total Acres	.49	.53	1.02

The cumulative effect of fully protecting all commercial and industrial lands that are impacted by riparian or wetland resources could increase the need for UGB expansion to meet land needs.

A 50-foot development setback is required under stormwater provisions of the Springfield Development Code, and thus the 1.02 impact of protecting W-23 with the setback is not attributed to this report.

Site: W-24 (W-R7)	Acres: .51	OFWAM: Locally Significant Wetland is within ¼ mile of DEQ 303 (d) listed water body	Associated Inventoried Riparian Resource? Yes: S-28 WHA Score: 61 High Quality Resource Site
	Cowardin Class: Palustrine Forested (PFO); Wetland with trees growing in standing water or saturated soils, or small wetlands entirely beneath an overhanging forest canopy.	Medium Quality Wetlands	

Goal 5 Recommendation: Limit conflicting uses that may impact the wetland. Maintain an average 25-foot development setback from the wetland. Allow development within the 150-foot impact area using low impact development practices that are appropriate for the soil, water table and other site characteristics.



Description:

W-24 is located at the bottom of surrounding steep slopes. There is a narrow intermittent drainage channel that flows through the middle of the wetland. This drainage continues east through a long culvert under McVay Hwy. and the railroad and out to the Willamette River. W-24 is located between I-5 and McVay Hwy. with residential land uses to the north and south.

Dominant Wetland Vegetation			
Trees/ Shrubs		Vines/ Herbs	
<i>Populus trichocarpa</i>	Black Cottonwood	<i>Phalaris arundinacea</i>	Reed Canary Grass
<i>Salix lasiandra</i>	Pacific Willow	<i>Oenanthe sarmentosa</i>	Water-Parsley
<i>Cornus stolonifera</i>	Red-Osier Dogwood	<i>Urtica dioica</i>	Stinging Nettles
		<i>Carex obnupta</i>	Slough Sedge
		<i>Equisetum arvense</i>	Field Horsetail

Adjacent upland species: *Acer macrophyllum*, *Rubus discolor*, *Festuca arundinacea*, *Daucus carota*, *Polystichum munitum*, *Dactylis glomerata*

Soils—Mapped Series	Dixonville-Philomath-Hazelair Complex
Hydrologic Source	Groundwater

Wetland and Impact Area Summary

Wetland Acreage	.51
Impact Area Acreage	1.69
Combined Wetland and Impact Area	2.20
Vacant Acres within the Combined Area	.86
Parcels Affected (Including Impact Area)	4
Combined Parcel Acreage	22.03

Conflicting Uses by Acre and Zoning District

SITE ID	LD	PL	TOTAL ACRES
W-24	.35	0	*.35
W-24 Impact Area	1.28	.41	1.69
Total	1.63	.41	2.04

*Portions of the wetland fall within right-of-way which has no zoning designation; thus this figure is less than that shown above for wetland acreage.

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LD	PL	TOTAL ACRES
W-24	0	0	0
W-24 Impact Area	.53	.33	.86

SITE ID	LD	PL	TOTAL ACRES
Total	.53	.33	.86

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? **No.**

The Glenwood Refinement Plan includes policies that give direction for environmental design. The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for W-24

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

W-24 is rated as a "Moderate Quality Wetlands." The wetland's water quality and hydrologic control functions are impacted or degraded. The resource provides habitat for some species, but the OFWAM analysis concludes that it does not provide a diverse wildlife habitat. Fully allowing conflicting uses would mean the loss of what little function and habitat that W-24 provides.

Social Consequences

W-24 is isolated and not easily accessible to the public. It is not appropriate for educational or recreational uses. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. The site has moderate potential for enhancement which may make it more of a community amenity.

Economic Consequences

Fully allowing conflicting uses would mean the loss of the water quality and hydrologic control functions of the resource. These functions could be mimicked using engineered facilities at a significant cost. Fully protecting the resource site and its impact area would mean the loss of .86 acres of vacant residential land within the combined wetland and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses that may impact the wetland. Maintain an average 25-foot development setback from the wetland. Allow development within the 150-foot impact area using low impact development practices that are appropriate for the soil, water table and other site characteristics.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	LD	PI	TOTAL ACRES
W-24	0	0	0
W-24 25-ft. Setback	.02	0	.02
Total	.02	0	.02

About .02 acres of W-24 is classified as vacant by the Lane County Assessor's Office. The vacant acreage includes portions of 3 lots. Limiting conflicting uses would allow some development to occur within the wetland area where the developer could show how the essential functions of the wetland could be preserved or enhanced.

A 25-foot setback would affect .02 acres of vacant residential land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other open space are within the setback. Stormwater management facilities required for development can be placed within the setback under SDC Section 4.3-117.

Employing low impact development practices within 150 feet of the wetland could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in SDC Section 4.3-115.

Reduction in the Buildable Land Inventory:

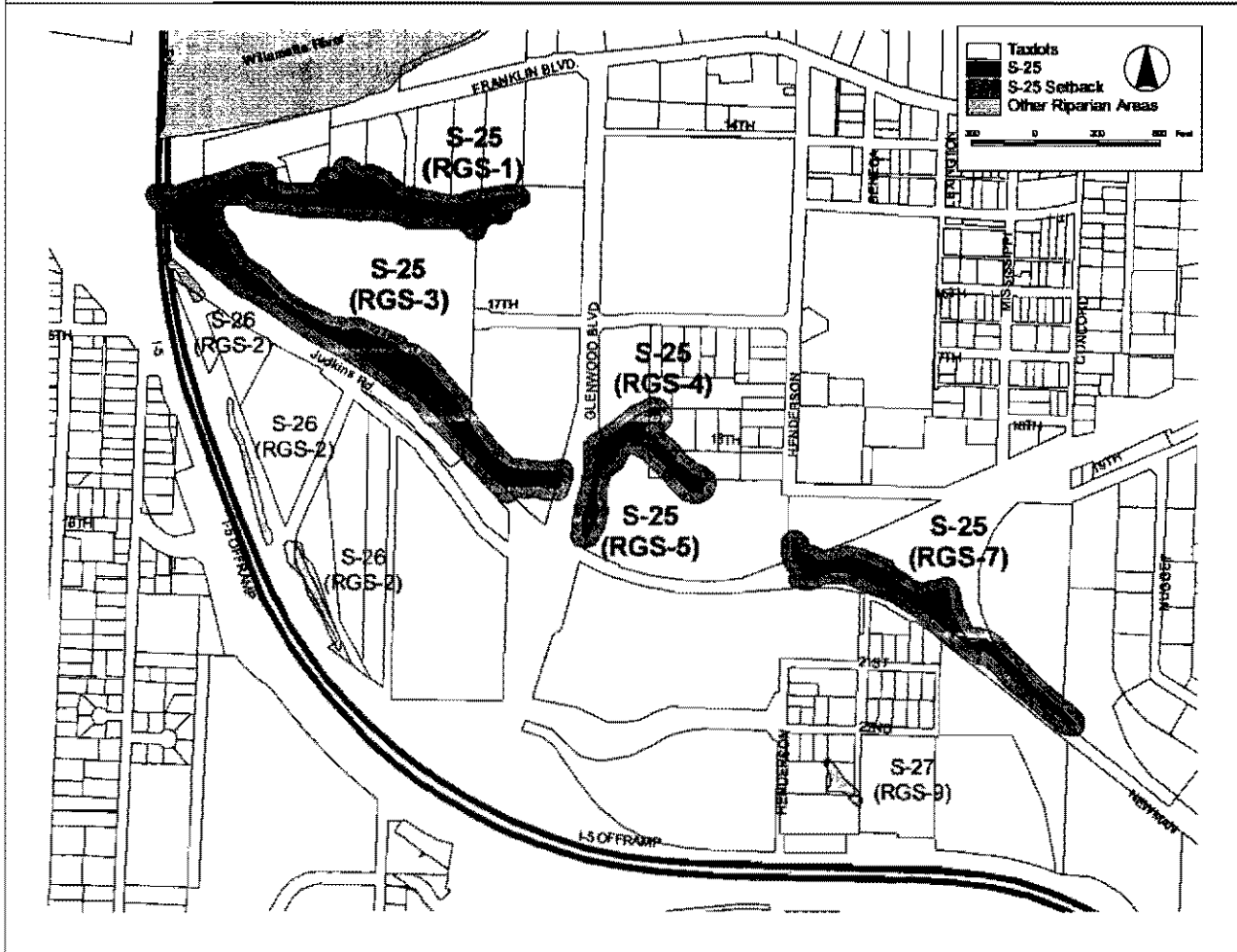
The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as "Vacant," or "Redevelopable." These classifications are not the same used by the Lane County Assessor's Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Neither the CIBL nor the RLS showed W-24 or its setbacks as inventoried land. Protecting W-24 will not cause a reduction in those inventories.

[Insert S-25 through S-28 at pg. 253]

<p>Site:</p> <p>S-25 (Formerly E39) (RGS-1,3,4,5, and 7)</p>	<p>Associated Wetlands:</p> <p>W-20, W-21, W-22 Moderate Quality Wetlands</p>	<p>Acres:</p> <p>12.30</p>	<p>WHA Score:</p> <p>46-47 High Quality Resource Site</p>
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Goal 5 Recommendation: Limit conflicting uses and employ low impact development practices when developing within 150 feet of the watercourse. S-25 is associated with the Glenwood Slough, the Glenwood North Channel and a section of the Moon Mt. System. The Slough and North Channel are protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects S-25. A 339 ft. segment of S-25 is not protected by the 50-ft setback provided by the stormwater WQLW standards found in SDC Section 4.3-115. This unprotected segment of S-25 should be covered by a 25-foot development setback and the protections afforded by SDC Section 4.3-117.



Description:

Site S-25 (formerly E-39) consists of segments of the Glenwood Slough—North Channel and a section of the Moon Mt. system near or adjacent to Interstate 5, Franklin Boulevard, Glenwood Boulevard and the Union Pacific Railroad tracks in the Glenwood area. S-25 is generally surrounded by industrial uses, railroad tracks and a highway.

The western portion of S-25 wraps around the Glenwood solid waste transfer station. At its west end, the slough passes under the Willamette River I-5 overpass. This western portion has been channelized with cement sides.

The portions of S-25 on either side of Glenwood Boulevard are more natural and contain significant riparian vegetation including willows (*Salix* spp.), black cottonwood (*Populus trichocarpa*), sedge (*Carex* spp.), rush (*Juncus* spp.), cattails (*Typha latifolia*), and reed canarygrass (*Phalaris arundinacea*). Interspersion with other natural areas is limited by I-5 and other adjacent roads, but S-25's proximity to the Willamette River may increase the number of wildlife species in the area. The Division of State Lands has determined that portions of this site are regulated wetlands (W-20, W-21, and W-22).

No fish survey was conducted for S-25 and it is not shown on ODFW maps of fish-bearing streams. The proximity and open connectivity to the Willamette River also suggests that fish are present in the Slough.

Observed Vegetation

Woody Vegetation		Herbaceous Vegetation	
<i>Fraxinus latifolia</i>	Oregon Ash	<i>Festuca arundinacea</i>	Tall Fescue
<i>Salix sitchensis</i>	Sitka Willow	<i>Plantago lanceolata</i>	English Plantain
<i>Cornus stolonifera</i>	Red-Osier Dogwood	<i>Daucus carota</i>	Queen Anne's Lace
<i>Rubus discolor</i>	Himalayan blackberry	<i>Aira caryophyllea</i>	Silver Hairgrass
<i>Populus trichocarpa</i>	Black Cottonwood	<i>Lathyrus sp.</i>	Wild Pea
<i>Robinia pseudoacacia</i>	Black Locust	<i>Cirsium arvense</i>	Canada Thistle
<i>Rubus armeniacus</i>	Armenian Blackberry	<i>mixed grasses (unidentified)</i>	
<i>Acer macrophyllum</i>	Oregon Maple		

Wetland Vegetation

Trees/ Shrubs		Vines/ Herbs	
<i>Fraxinus latifolia</i>	Oregon Ash	<i>Mentha arvensis</i>	Field mint
<i>Salix sitchensis</i>	Sitka Willow	<i>Biden sp.</i>	Begger's tick.
<i>Cornus stolonifera</i>	Red-Osier Dogwood	<i>Juncus effusus</i>	Soft Rush
		<i>Carex leptopoda</i>	Short-Scale Sedge

Soils

Soils—Mapped Series	Chehalis silty clay loam
Hydrologic Source	Groundwater

Summary of Riparian Functional Assessment

Riparian ID	Reach Length	Stream/Pond Width	Riparian Width	Water Quality	Flood Management	Thermal Regulation	Wildlife Habitat
RGS-1	1,681 ft.	120 ft.	50 ft.	H	H	H	M
RGS-3	2,706 ft.	50-75 ft.	100 ft.	H	L-M	H	M-H
RGS-4	780 ft.	50-75 ft.	50-75 ft.	H	M	H	H
RGS-5	339 ft.	2-6 ft.	75 ft.	M	M	H	M
RGS-7	1,669 ft.	8-10 ft.	120 ft.	H	L	H	M
Total Length: 7185 ft.			Modal Average	H	M	H	M

Resource and Impact Area Summary

Resource Acreage:	12.30
Impact Area Acreage:	45.01
Combined Resource and Impact Area:	55.02
Vacant Acres within the Combined Area:	8.57
Parcels Affected (Including Impact Area):	32
Combined Parcel Acreage:	308.09

Conflicting Uses by Acre and Zoning District

SITE ID	LDR	LMI	PLO	*Right-of-Way	TOTAL ACRES
S-25	.17	7.71		4.42	7.88
S-25 Impact Area	1.09	28.23	1.01	14.68	30.33
Total	1.26	35.94	1.01	16.81	38.21

*Right-of-way does not typically have a zoning designation. As such, the right-of-way acreage shown for the conflicting use acreage is not counted towards the total. The right-of-way acreage is shown here because a large portion of the resource and its impact area are within ODOT and railroad right-of-ways.

Conflicting Uses by Vacant Acre and Zoning District

SITE ID	LDR	LMI	PLO	TOTAL ACRES
S-25	0	.67	0	.67
S-25 Impact Area	0	6.89	1.01	7.90
Total	0	7.56	1.01	8.57

Existing Protections

Is the site protected by minimum development setbacks and site plan review standards described in Section 4.3-115 of the Springfield Development Code? Yes.

S-25 includes the Glenwood Slough, the Glenwood North Channel and a section of the Moon Mt. system. The Glenwood Slough and the North Channel are tributaries to a water quality limited watercourse (Willamette River) and are protected by a 50-foot setback and a site plan review requirement.

S-25 overlaps protected wetlands W-20, W-21, and W-22. The Glenwood Refinement Plan includes policies that give direction for environmental design affecting S-25. The Refinement Plan states, "Significant wetland areas in Glenwood shall be protected from encroachment and degradation in order to retain their important functions and values related to fish and wildlife habitat, flood control, sediment, and erosion control, water quality control, and ground water pollution control," (Policy 1, pg. 92, Environmental Element).

Site Specific ESEE Analysis for S-25

This section discusses ESEE impacts that are specific to this particular site. For a broader discussion of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on wetlands, see the General ESEE Analysis found in Section 8 of this report.

Environmental Consequences

With WHA scores ranging from 22 to 61 for five individual reaches of the stream, S-25 is rated as a high quality resource site. The Riparian Functional Assessment prepared by Pacific Habitat Services rated S-25's various reaches as well. The mode average of the assessment scores for S-25's Water Quality and Thermal Regulation Functions was "High." S-25's Flood Management and Wildlife Habitat functions average was "Medium."

Much of S-25 includes inventoried locally significant wetlands (W-20, W-21, and W-22). The water quality and hydrologic control functions of these wetland sites are impacted or degraded. The resource provides habitat for some wildlife species, although the fish habitat is degraded. Fully allowing conflicting uses would mean the loss of the riparian and wetland functions that S-25 provides.

Social Consequences

S-25 is located in an area that is heavily impacted by existing industrial and residential development. The stream is not easily accessible to the public and it is not located near a school. The Willamalane Park and Recreation District Comprehensive Plan shows no anticipated park facilities or natural areas near the resource site. For these reasons it is not appropriate for educational or recreational uses.

Economic Consequences

Fully allowing conflicting uses would mean the loss of the riparian and wetland functions of the resource. These functions could be mimicked using engineered facilities at a significant cost. Fully protecting the resource site would mean the loss of 7.56 acres of vacant industrial land within the combined resource and impact area boundaries.

Energy Consequences

None of note.

Recommended Program for Protection

Limit conflicting uses and employ low impact development practices when developing within 150 feet of the watercourse. S-25 includes the Glenwood Slough, the Glenwood North Channel and a section of the Moon Mt. system. The Slough and the North Channel are protected by a 50-foot development setback described in SDC Section 4.3-115 and the site plan review standards described in SDC Section 5.17-100. This 50-foot setback protecting the slough also protects S-25. A 339 ft. segment of S-25 is not protected by the 50-ft setback. This unprotected segment of S-25 should be covered by a 25-foot development setback and the protections afforded by SDC Section 4.3-117.

Impact of Protection Measures on Vacant Acreage and Buildable Land Inventory

Impact on Vacant Acreage by Zoning District

SITE ID	PLO	LMI	TOTAL ACRES
S-25		.67	.67
*S-25 25/50-ft. Setback	.04	2.45	2.49
Total	.04	3.12	3.16

*A 339-ft segment of S-25 falls outside of the 50-ft protection of the stormwater WQLW program. This segment is protected by a 25-ft. setback.

About .67 acres of S-25 is classified as vacant by the Lane County Assessor's Office. The vacant acreage includes portions of 5 lots. Limiting conflicting uses would allow some development to occur within the riparian resource area where the developer could show how the

essential functions of the riparian corridor could be preserved or enhanced. A 50-foot development setback is already required for the riparian area under SDC 4.3-115. No additional setback is proposed.

A 25-to-50-foot setback would affect 3.12 acres of vacant industrial land. The affect of the setback on buildable land could be reduced by aligning development such that yards and other open space are within the setback. Stormwater management facilities required for development can be placed within the setback under SDC Section 4.3-115.

Employing low impact development practices within 150 feet of the riparian area could reduce the impact of nearby development on the resource. Some low impact development practices are already incorporated into the stormwater quality protection standards found in SDC 4.3-115.

Reduction in the Buildable Land Inventory:

The Commercial Industrial Buildable Lands Study (CIBL) that was completed in 2009 identified a shortage of commercial and industrial lands. The Springfield Residential Lands Study (RLS) that was also completed in 2009 identified a small surplus of residential lands. These inventories include some Glenwood sites and classified each as “Vacant,” or “Redevelopable.” These classifications are not the same used by the Lane County Assessor’s Office. These classifications stem from judgments made by ECONorthwest in collaboration with a steering committee that helped frame assumptions about what is redevelopable and vacant.

Protecting S-25 and its 25-50 foot setback area from future development effectively reduces the CIBL inventory by a total of 3.26 acres and the RLS by a total of 1.11 acres, for a total of 3.75 acres.

Impact of Recommended Protection on Commercial, Industrial and Residential Land Inventories

Site S-25 Zoning	Redevelopable	Vacant	Total Acres
LDR	.49		.49
LMI	2.15	1.11	3.26
Total Acres	2.64	1.11	3.75

The cumulative effect of fully protecting all commercial and industrial lands that are impacted by riparian or wetland resources could increase the need for UGB expansion to meet land needs.

A 50-foot development setback is already required under stormwater provisions of the Springfield Development Code, and thus 2.39 acres of the 3.75 acre impact of the setback is not attributed to this report.