



**CITY OF
BAINBRIDGE ISLAND**

**CITY COUNCIL STUDY SESSION
TUESDAY, MARCH 19, 2024**

**COUNCIL CHAMBERS
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA**

AND

**REMOTE MEETING ON ZOOM
PLEASE CLICK THE LINK BELOW TO JOIN THE WEBINAR:
[HTTPS://BAINBRIDGEWA.ZOOM.US/J/92947338351](https://bainbridgewa.zoom.us/j/92947338351)
OR TELEPHONE: US: +1 253 215 8782
WEBINAR ID: 929 4733 8351**

AGENDA

- 1. CALL TO ORDER / ROLL CALL - 6:00 PM**
- 2. APPROVAL OF AGENDA / CONFLICT OF INTEREST DISCLOSURE - 6:05 PM**
- 3. REGULAR BUSINESS**
 - 3.A (6:10 PM) Receive Presentation from Puget Sound Energy, 20 Minutes**
[PSE City of Bainbridge City Council Presentation.pdf](#)
 - 3.B (6:30 PM) Discuss Financial Support of Community Based Affordable Housing Project, 20 Minutes**
[Affordable Housing Project Financial Chart.pdf](#)
 - 3.C (6:50 PM) Review and Discuss Affordable Housing Revenue Sources, 15 Minutes**
[Updated Aff Hsng Funding Options Matrix.xlsx](#)
[012920 Memorandum re Lodging Tax_Hotel Motel Use for Affordable Housing.pdf](#)
 - 3.D (7:05 PM) Discuss Impacts and Consider Revisiting Requirements for Electric Car Charging Infrastructure in New Commercial and Multi-Family Developments -Planning, 20 Minutes**
 - 3.E (7:25 PM) Discuss Report on Pesticides and Herbicides - Public Works, 15 Minutes**
[2023 Annual Pesticide Use Report.pdf](#)

- 3.F (7:40 PM) Discuss Contents and Policy Implications of Two Documents Pertaining to the Updates of the Winslow Subarea Plan and the Comprehensive Plan, 20 Minutes
Draft Summary of Alternatives.pdf
Orientation Interview Summary.pdf

4. COMMITTEE REPORTS - 8:00 PM

5. ADJOURNMENT - 8:10 PM

GUIDING PRINCIPLES

Guiding Principle #1 - Preserve the special character of the Island, which includes downtown Winslow's small town atmosphere and function, historic buildings, extensive forested areas, meadows, farms, marine views and access, and scenic and winding roads supporting all forms of transportation.

Guiding Principle #2 - Manage the water resources of the Island to protect, restore and maintain their ecological and hydrological functions and to ensure clean and sufficient groundwater for future generations.

Guiding Principle #3 - Foster diversity with a holistic approach to meeting the needs of the Island and the human needs of its residents consistent with the stewardship of our finite environmental resources.

Guiding Principle #4 - Consider the costs and benefits to Island residents and property owners in making land use decisions.

Guiding Principle #5 - The use of land on the Island should be based on the principle that the Island's environmental resources are finite and must be maintained at a sustainable level.

Guiding Principle #6 - Nurture Bainbridge Island as a sustainable community by meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Guiding Principle #7 - Reduce greenhouse gas emissions and increase the Island's climate resilience.

Guiding Principle #8 - Support the Island's Guiding Principles and Policies through the City's organizational and operating budget decisions.



City Council meetings are wheelchair accessible. Assisted listening devices are available in Council Chambers. If you require additional ADA accommodations, please contact the City Clerk's Office at 206-780-8604 or cityclerk@bainbridgewa.gov by noon on the day preceding the meeting.



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 20 Minutes

AGENDA ITEM: (6:10 PM) Receive Presentation from Puget Sound Energy,

SUMMARY: Puget Sound Energy Local Government Affairs & Public Policy Manager Christine Nhan and Molly Reed, Puget Sound Energy's Project Manager on Bainbridge Island, will provide a presentation on the upcoming changes at the Murden Cove substation. They will be joined by Matt Von Ruden from Washington State Ferries who will share an overview of the ferry system's energy needs.

AGENDA CATEGORY: Presentation

PROPOSED BY: Executive

RECOMMENDED MOTION: Information only.

COMMUNITY ENGAGEMENT AND OUTREACH:

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[PSE City of Bainbridge City Council Presentation.pdf](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

PSE on bainbridge island

Bainbridge Island City Council Presentation

March 19, 2024



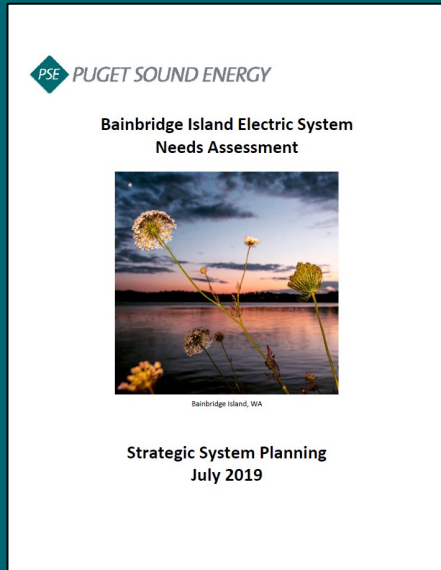
**PUGET
SOUND
ENERGY**

Helping meet our clean energy goals



- ◆ PSE aspires to be a beyond net zero carbon energy company by 2045
- ◆ PSE is a regulated utility required to provide a reliable energy system that can meet customer's changing needs
- ◆ These projects are part of our overall effort to create a cleaner energy future

Needs and Solution



Needs: poor transmission reliability, aging infrastructure and increased demand for power

Solution: combine new grid infrastructure and energy efficiency to ensure safe, dependable power for businesses and residents

Changes from 2019 Plan

- ◆ Proposed solution for Bainbridge developed in 2019
- ◆ Since then, we have more information and refined the solution
- ◆ Second transformer to be installed at Murden Cove Substation to meet all our customers' energy needs

PSE's proposed solution



Rebuild the aging Winslow Tap to improve reliability and resiliency

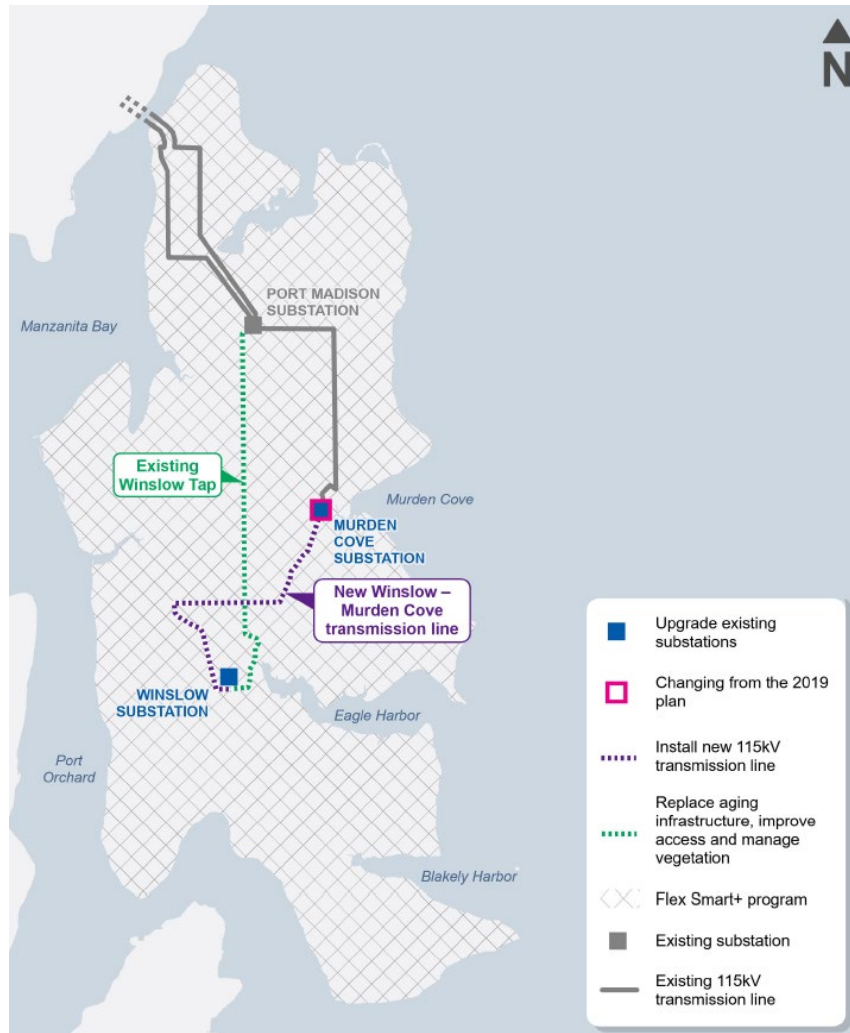
New transmission line to improve reliability and resiliency

Substation Improvements required for transmission line connection

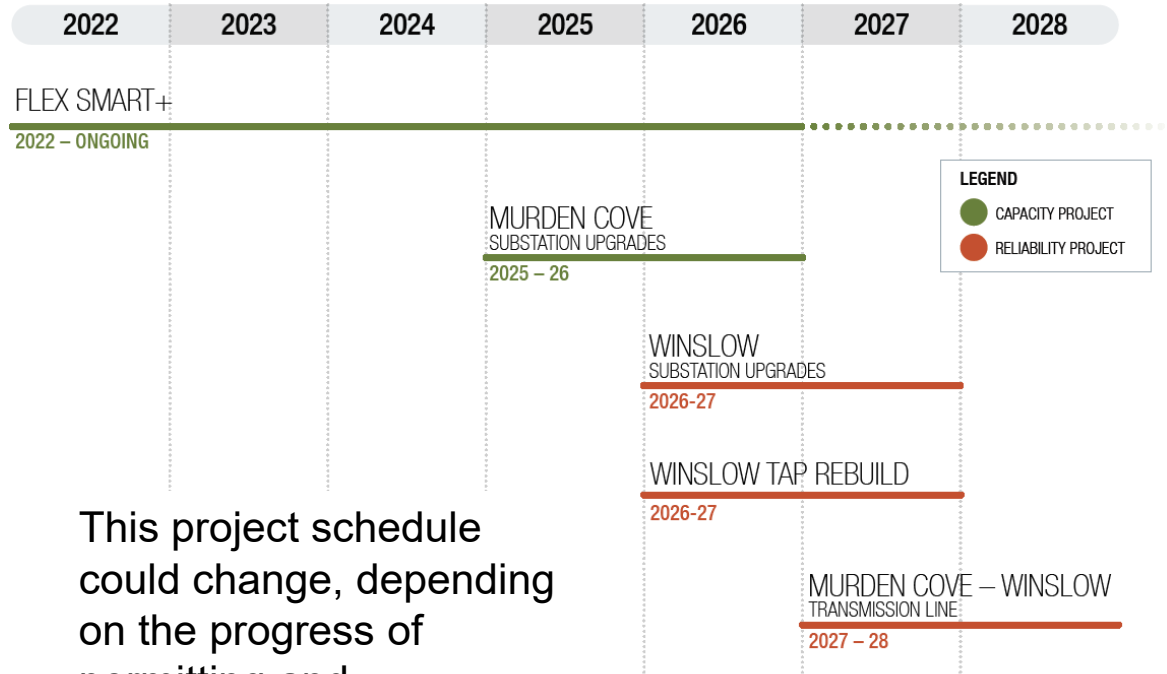
Targeted conservation and demand response tools to reduce demand

Reliability, Resiliency and Capacity

Proposed Solution



Project Schedule



This project schedule could change, depending on the progress of permitting and construction.

LAST UPDATED: 02/24

Project is consistent with the City of Bainbridge Island plans and goals



Goal U-1: *Ensure that reliable utility services are available to all Bainbridge Island residents.* (COBI Comprehensive Plan, 2017)



Policy U-14.3: *Encourage the electric service provider to improve reliability, with particular attention to adding transmission redundancy and mitigating impacts on service from storms or other natural events.* (COBI Comprehensive Plan, 2017)



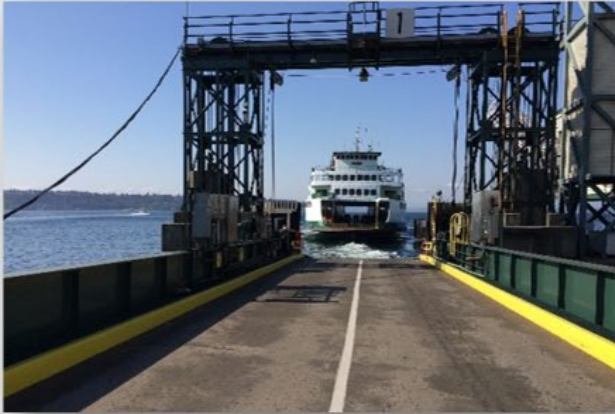
Climate Action Plan to reduce GHG emission by 90% by 2045 contains several priority actions that could have impact on load:

- 3.B.1.c: *Prohibit propane, fuel oil, and wood stoves for primary heating in new buildings.*
- 4.B.1.a. *Transition COBI's fleets to primarily electric vehicles, use biofuels where not an option, and encourage other Bainbridge Island taxing districts to also develop a plan.*
- 4.B.2.a. *Evaluate current code to see if a need to increase the number of EV charge-ready for all new development/major renovations and multifamily units/commercial development include EV charging infrastructure.*



Electrification Program Elements

Electrify **16**
terminals



Convert **6**
existing
vessels

Build **16** new
vessels

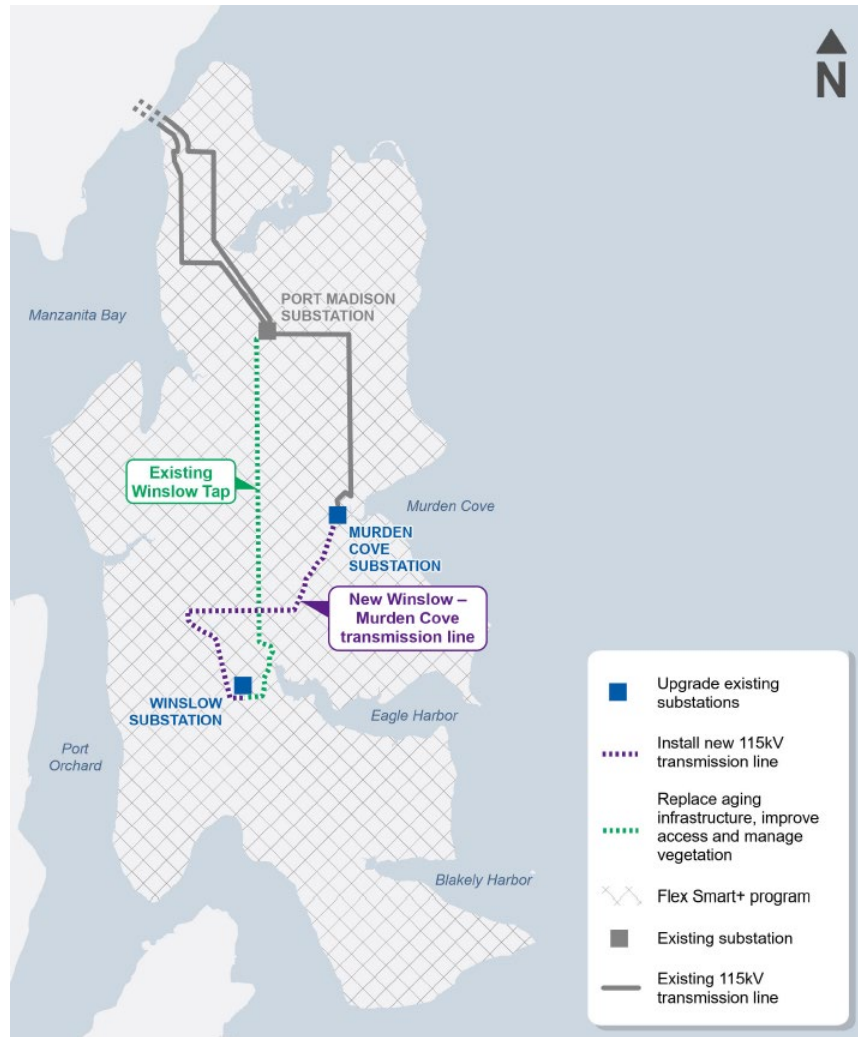


Bainbridge Terminal Overview

- Pre-design studies underway
- Data collection and review underway
- Coordination with WSDOT Olympic Region regarding Right of Way
- Puget Sound Energy is utility partner, MOU signed summer 2023
- Proposed electrification schedule for Bainbridge Island:
 - Vessels will be electrified in 2024 and 2025; 20% fuel savings
 - Utility work in place in 2026 for terminal electrification in 2027; 95% fuel savings



Questions?



For more information



Email us at **info@psebainbridge.com**



Leave a message at **1-888-878-8632**



Subscribe to our email newsletter at **pse.com/bainbridge**



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 20 Minutes

AGENDA ITEM: (6:30 PM) Discuss Financial Support of Community Based Affordable Housing Project,

SUMMARY: Councilmembers have expressed interest in providing financial support for affordable housing projects sponsored by non-governmental entities. Over the years, the City has provided various levels of financial support for housing projects but not in a systematic or predictable fashion.

The City's capacity to provide financial support for affordable housing projects has been hampered by lack of financial resources, lack of information about potential future projects, and the lack of an organized or comprehensive strategy for funding affordable housing projects.

Several conditions have changed in recent years. Specifically, the City itself has become directly involved with providing affordable housing via leveraging City-owned property for affordable housing purposes, and in 2022, the City elected to increase sales tax by 1/10 of 1% for affordable housing, which has created a flow of funds dedicated to affordable housing purposes.

Now, the City is in a better position to look at a more comprehensive approach to provide support and increase the affordable housing inventory in the community. It is recommended that the City consider establishing a long-term affordable housing plan, similar to a long-term Capital Improvements Plan, combined with a call for projects similar to a call for applications used in social services funding.

Attached is a spread sheet that illustrates affordable housing financial revenue and anticipated expenses over a five-year period.

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: Discussion and Council direction.

COMMUNITY ENGAGEMENT AND OUTREACH:

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	No

BACKGROUND: Councilmembers have expressed interest in providing financial support for affordable housing projects sponsored by non-governmental entities. Over the years, the City has provided various levels of

financial support for housing projects. Assistance ranges from \$9,000 in 2007 for the Vineyard Lane project to \$2 million in 2022 for the 13-unit Housing Resources Bainbridge Madison Avenue project. However, the assistance provided by the City has not been provided in a systematic or predictable fashion.

The City's capacity to provide financial support for affordable housing projects has been hampered by lack of financial resources, lack of information about potential future projects, and the lack of an organized or comprehensive strategy for funding affordable housing projects.

The City has made progress in providing more predictable assistance and several conditions have changed in the recent years. In 2023, the City Council adopted Resolution No 2023-06 to subsidize building and planning fees for affordable housing projects. This is a significant benefit for non-governmental affordable housing developments. Based upon staff's current limited knowledge of upcoming projects, this assistance could range from \$17,000 to \$100,000 annually. In 2022, the City elected to increase sales tax by 1/10 of 1% for affordable housing, which has created a flow of funds dedicated to affordable housing purposes. Annual estimated revenue ranges around \$850,000 from the 1/10 of 1%.

However, the lack of structure and knowledge of pending affordable housing projects remains an impediment to maximizing the City's affordable housing resources. Towards this end, it is recommended that the City consider establishing a long-term affordable housing plan, similar to a long-term Capital Improvement Plan, combined with a call for projects, similar to a call for applications used in social service funding. It is envisioned the City would ask community organizations to submit their proposed projects and plans for projects. The information would include location, estimated number of affordable housing units, targeted income group, whether or not the applicant has current site control, proposed principal source of financing, and timing. With this information, the City can review and compare proposed projects. Affordable housing projects are expensive and may require accumulating funds over several years. A multi-year plan will allow the City to allocate resources over a longer time horizon.

Attached is a table providing an overview of dedicated affordable housing revenue and an anticipated expenditure budget.

ATTACHMENTS:

[Affordable Housing Project Financial Chart.pdf](#)

FISCAL DETAILS: As of 2024, the Housing Trust Sub-Fund had a balance of \$305,000. The 1/10 or 1% sales tax will produce about \$850,000 annually in revenue. The Affordable Housing Sales Tax Credit provides approximately \$44,000 in annual revenue.

Fund Name(s):

Coding:

		2024				2025			2026			2027			2028		
		January Balance	Revenue	Expenses	YE Balance	Revenue	Expenses	YE Balance	Revenue	Expenses	YE Balance	Revenue	Expenses	YE Balance	Revenue	Expenses	YE Balance
80% AMI	Housing Trust Subfund Rental Assistance Subsidized P&D Fees Misc. AH Mgmt	\$ 305,000		\$ - \$ (17,600) \$ (5,000)	\$ 282,400		\$ (45,000) \$ (30,000) \$ (5,000)	\$ 202,400		\$ (46,000) \$ (100,000) \$ (5,000)	\$ 51,400		\$ (24,000) \$ (22,500) \$ (5,000)	\$ -		\$ - \$ - \$ -	\$ -
60% AMI	AH Taxes Sales Tax CHIP Reimbursement Mgmt Analyst (25%) 625 Bldg Consultant Special Demolition Gap Funding	\$ 1,411,000	\$ 816,000	\$ (42,000) \$ (30,000) \$ (1,000,000) \$ (525,000)	\$ 630,000	\$ 832,000 \$ 190,000	\$ (190,000) \$ (43,400) \$ (30,000)	\$ 1,388,600	\$ 848,000	\$ (44,800) \$ (30,000)	\$ 2,161,800	\$ 865,000	\$ (46,200) \$ (3,500,000)	\$ (519,400)	\$ 882,000	\$ (46,200)	\$ 316,400
60% AMI	AH Sales Tax Credit	\$ 172,000	\$ 44,000		\$ 216,000	\$ 44,000		\$ 260,000	\$ 44,000		\$ 304,000	\$ 45,000		\$ 349,000	\$ 45,000		\$ 394,000
NA	General Fund	\$ 366,000			\$ 366,000			\$ 366,000			\$ 366,000			\$ 366,000			\$ 366,000
TOTAL		\$ 2,254,000	\$ 860,000	\$ (1,619,600)	\$ 1,494,400	\$ 1,066,000	\$ (343,400)	\$ 2,217,000	\$ 892,000	\$ (225,800)	\$ 2,883,200	\$ 910,000	\$ (3,597,700)	\$ 195,600	\$ 927,000	\$ (46,200)	\$ 1,076,400

*These values do not include \$2M in ARPA funds for Madison & Wyatt Affordable Homes (13 Units)



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 15 Minutes

AGENDA ITEM: (6:50 PM) Review and Discuss Affordable Housing Revenue Sources,

SUMMARY: In 2020, staff presented a memorandum to the City Council with regard to the use of Lodging Tax (LTAC) for affordable housing purposes. The memorandum discussed how LTAC funds are limited to debt service for affordable housing projects under certain conditions, and Bainbridge Island's \$150,000 annual LTAC is inadequate to service any significant bond offering.

It is proposed Council take the discussion beyond LTAC and review other forms of affordable housing assistance. A chart has been prepared to summarize affordable housing resources available to the city.

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: Discussion and Council direction.

COMMUNITY ENGAGEMENT AND OUTREACH:

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Updated Aff Hsng Funding Options Matrix.xlsx](#)

[012920 Memorandum re Lodging Tax Hotel Motel Use for Affordable Housing.pdf](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

Source	Affordable Housing	Recurring/ one-time	Eligibility Criteria Highlights		Current City revenue	Annual Ongoing Revenue	One-time Revenue
Limited (Councilmanic) tax general obligation (LTGO) bonds	X	One-time	- Debt service paid out of existing resources (does not increase property taxes). - Funds must be spent within 36 months for capital projects identified in bond ordinance. - Council approves bond issuance by majority vote	No	Debt service out of existing resources	Depends on size of bond issuance	
Excess Levy - Unlimited (voted) tax general obligation (UTGO) bonds	X	One-time	- Increase of property tax pays the debt service. - Funds must be spent within 36 months for capital projects identified for voter approval. - 60% voter approval with voter turnout ≥ 40% - Revenues are restricted to capital purposes	No	Depends on size of bond issuance	Depends on size of bond issuance	
Levy Lid Lift - Single Year	X	Recurring	- Simple majority vote of voters. Any election. - May be permanent or temporary - Constitutional restrictions on max levy rate: \$10/\$1,000 (State), \$5.90/\$1,000 (Local), \$3.60/\$1,000 (City) - Allows cities to exceed the 1% annual lid for one-year only, then may use higher levy to "reset" base to higher level - Can be temporary or any # of years or permanent. If used for debt service limited to 9 years. - May exempt senior citizens, disabled veterans and people with disabilities	No	\$ 0.50/\$1,000 increase in yr 1 would yield roughly \$6.6 million/yr \$0.50/\$1,000 increases property tax by roughly \$560/yr for median \$1.1 million home	\$0.50/\$1,000 levy increase would yield roughly \$37 million over 6 years	
Levy Lid Lift - Multi-year	X	Recurring	- Simple majority vote, Primary or general election only - May be permanent or temporary - Constitutional restrictions on max levy rate: \$10/\$1,000 (State), \$5.90/\$1,000 (Local), \$3.60/\$1,000 (City) - Lid lift lasts up to 6 years, with annual limit factor specified by city, then 1% - After measure expires (if temporary levy), levy will revert back to prior levels - Voted measure, specifies property tax percentage increase after year 1 (e.g. 3% annually, 5% annually for first 2 years, 4% annually after that, or adjusted to Consumer price index (CPI) - May exempt senior citizens, disabled veterans and people with disabilities - Maximum of 10 years, if for debt service	No	\$0.50/\$1,000 increase in yr 1 with 4% increases in years 2-6 would yield about \$7.1 million/yr \$0.50/\$1,000 + 4% increases yrs 2-6 would increase property tax on median \$1.1 million home by roughly \$620/yr	- .50/\$1,000 levy increase in yr 1 with 4% increases in years 2-6 would yield roughly \$42.5 million over 6 years	

Source	Affordable Housing	Recurring/ one-time	Eligibility Criteria Highlights		Current City revenue	Annual Ongoing Revenue	One-time Revenue
Affordable Housing Property Tax Levy	X	One time up to 10 years	- Simple majority vote - May be imposed for up to 10 years. - City must adopt an affordable housing finance plan for expenditure of levy funds. - If both city and county impose levy, combined rate must be ≤ \$0.50/\$1,000. - Subject to \$10 constitutional limit but not \$5.90 limit.	No	Estimated Maximum of \$6.6 million per yr - Average impact to median \$1.1 million home is \$560/yr or \$5,600 over 10 years.	- .50/\$1,000 levy increase would yield roughly \$66 million over 10 years	
Tax Increment Financing	X	Recurring	- May be used for streets, roads, and other infrastructure and long-term affordable housing (including retrofit for energy efficiency) - Allows cities to exceed property tax limitation by more than 1% for identified projects which increase assessed value in designated area (Tax increment area) - Proposed public improvement are expected to encourage private investment and development within the increment area and increase assessed valuations within the increment area. - Requires project plan, minimum of 2 public hearings, ordinance - At the time of creation, the TFI may not have a combined aggregate assessed value of greater than \$200 million.	No	unable to determine - depends on TIF area and estimated property tax increase from an identified future project	unable to determine - depends on TIF area and estimated property tax increase from an identified future project	
Affordable Housing Sales Tax 0.1%	X	Recurring	- 60% of AMI or below - 60% or more of the revenue must be used for construction, health-related facilities, acquiring land for those purposes, or operating & maintenance costs	Yes	\$775,000	\$0 - funds committed for 625 project	
Affordable Housing Sales Tax Credit	X	Recurring	- 60% of median income of the city imposing the tax. - May be used for acquiring, rehabilitating, or constructing affordable housing - Capped at 2019 levels until 2039	Yes	\$50,000	\$138,000 in Fund Balance	
REET 2	X	Recurring	- Expires Jan 1, 2026 for use for Affordable Housing. Must demonstrate adequate funding for AH capital projects for a two-year period. - COBI REET revenues budgeted through 2024	Yes	\$1.2 million. Currently unprogrammed = \$0		

Source	Affordable Housing	Recurring/ one-time	Eligibility Criteria Highlights	Current City revenue	Annual Ongoing Revenue	One-time Revenue
Lodging tax (also known as LTAC)	X	Recurring	For Affordable Housing only: projects to serve those earning 30-80% of AMI - May only be used for debt service to fund workforce housing within one-half mile of a transit stop. - Use capped at 50% of annual revenues. - Must be approved by lodging tax advisory committee and City Council.	Yes	\$150,000	N/A
Washington State Housing Trust Fund (HTF)	X	One-time	- 80% of the AMI or below, but majority of funds targeted to 30% of the AMI or below.	No	N/A	Cities can apply to HTF for eligible activities
Affordable Housing Fund - general fund contributions from prior years	X	One-time	-80% of AMI or below.	N/A	\$0	\$290,000 in Fund Balance @ Jan 2024
Housing Trust Subfund subsidy repayments	X	One-time	- BIMC 3.38.040 - Provide direct financial and technical assistance to senior, disabled, and affordable housing projects - 80% of AMI or below.	Yes	N/A	\$305,000 in Fund Balance @ Jan 2024



CITY OF
BAINBRIDGE ISLAND

FINANCE AND ADMINISTRATIVE SERVICES DEPARTMENT
MEMORANDUM

DATE: January 29, 2020

TO: City Council
Morgan Smith, City Manager
Ellen Schroer, Deputy City Manager

FROM: DeWayne Pitts, Finance Director

SUBJECT: Lodging Tax/Hotel Motel Use for Affordable Housing

Conclusion: Under very limited circumstances, state law allows for lodging taxes, also known as LTAC funds, to be used to pay debt service for bonds issued to construct affordable housing workforce housing. Eligible projects must, for example, be within a half-mile of a transit station. Additional detail is provided below. Lodging taxes cannot be used for direct grants to non-profit organizations or individuals for affordable housing purposes. There are no cities in Washington State that have used the authority to use LTAC funds to repay debt service for bonds issues to support eligible housing projects.

Background: The lodging tax, also referred to as the hotel-motel tax and LTAC, is a consumer tax on lodging charges for periods of less than 30 consecutive days for hotels, motels, rooming houses, private campgrounds, RV parks, and similar facilities. The guiding principle for the use of lodging taxes is that they must be used for activities, operations and expenditures designed to increase tourism. All lodging tax revenues must be used for tourism promotion, acquisition of tourism-related facilities, or operation of tourism related facilities (RCW 67.28.1815 and RCW 67.28.1816) including:

- Tourism marketing
- Marketing and operations of specials events and festivals designed to attract tourists
- Operations and capital expenditures of tourism-related facilities owned or operated by a municipality or public facilities district, or
- Operations of tourism-related facilities owned or operated by non-profit organizations

Since July of 2013, capital expenditures for tourism-related facilities owned by nonprofit organizations are no longer permitted expenditures of lodging taxes funds.

Exception: 2015 legislation (SB 1223) also allows cities and counties to (optionally) use lodging tax revenues to repay general obligation bonds (RCW 67.28.150) or revenue bonds (RCW 67.28.160) for affordable workforce housing within a half-mile of a transit station. According to the Association of Washington Cities (AWC), the portions of the bill that apply to all cities are limited to using the revenues for general obligation or revenue bonds for workforce housing (within certain income parameters) within a half mile of a transit station. The revenue bonds in RCW 67.28.160 have further restrictions limiting the amount and tying some of the use to community preservation and development authorities in (RCW 43.167). Importantly, the final bill mentions that only one of those entities exists in the state – Pioneer Square in Seattle. It also appears that further restrictions would also have to include any proposals be vetted through the LTAC committee process outlined in (RCW 67.28.1616(2)).

HB 1223 from 2015 does mention authority for homeless youth and grants for services but these are limited to King County. All other cities must use the funds for general obligation bonds for workforce housing.

According to AWC, there are no cities they are aware of that have used this authority.



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 20 Minutes

AGENDA ITEM: (7:05 PM) Discuss Impacts and Consider Revisiting Requirements for Electric Car Charging Infrastructure in New Commercial and Multi-Family Developments -Planning,

SUMMARY: Electric Vehicle (EV) charging infrastructure is now a required component of construction projects, as laid out in state building code. City of Bainbridge Island's requirements (adopted in 2022) exceed those laid out in state code for commercial and multifamily construction types. There are three levels of electric vehicle charging requirements--EV-capable (conduit only), EV-ready (conduit and voltage), and EV Supply Equipment "EVSE" (a fully functioning charging station). The City of Bainbridge Island requires twice as many EV-capable and three times as many EV-ready spaces as the state code. The state code only applies to new buildings; the City's requirements also apply to expansions of buildings. The City's single family residential requirements are the same as in state code.

AGENDA CATEGORY: Discussion

PROPOSED BY: Planning & Community Development

RECOMMENDED MOTION: Discussion and Council direction.

COMMUNITY ENGAGEMENT AND OUTREACH:

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND: The City of Bainbridge Island adopted Ordinance 2022-14 in advance of the state building code adoption for required EV charging infrastructure as part of development projects. The state building code has now been adopted and requires EV charging to be built as part of new development. Local jurisdictions may pass ordinances to exceed the state requirements but may not require less than the state requires.

ATTACHMENTS:

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 15 Minutes

AGENDA ITEM: (7:25 PM) Discuss Report on Pesticides and Herbicides - Public Works,

SUMMARY: Bainbridge Island Municipal Code (BIMC) Chapter 16.30.080 requires an annual report to detail the City's use of pesticides from the prior calendar year.

AGENDA CATEGORY: Discussion

PROPOSED BY: Public Works

RECOMMENDED MOTION: Discuss the annual report on the City's pesticide use from the prior year.

COMMUNITY ENGAGEMENT AND OUTREACH: None planned.

FISCAL IMPACT:

Amount:	N/A
Ongoing Cost:	N/A
One-Time Cost:	N/A
Included in Current Budget?	No

BACKGROUND: In 2003, the City Council passed Ordinance No. 2003-15 regulating pest management and pesticide use under BIMC 16.30, to reduce the amount and toxicity of pesticides and herbicides in building and landscape management to a very minimal amount. Since 2003, City staff have adhered to BIMC 16.30 utilizing products on the Least Toxic Products list or seeking City Council approval for any emergency-use authorizations.

Noxious Weed Control in Bainbridge Island was managed by the Kitsap County's Noxious Weed Program and supplemented by the City through an interlocal agreement that was terminated in 2022, which left the City, residents, and landowners without a means to eradicate, control, and prevent the spread of noxious weeds. In March 2023, the Cooperative Weed Management Area (CWMA) and the City coordinated an interim noxious weed treatment project to address Poison Hemlock, Japanese Knotweed, Himalayan Blackberry, Scotch Broom, and English Holly within two of the City's largest open space areas: Lost Valley and Waterfront Park.

The CWMA recommended the use of two herbicides, Imazapyr and Triclopyr, for effective treatment and control of the species targeted by the 2023 Invasive Weed Treatment project. These herbicides are used

throughout the state by Washington Department of Transportation (WSDOT), and locally by Kitsap County's Noxious Weed Program. Additionally, both herbicides were effectively used on Bainbridge Island by Kitsap County since 2017.

On May 9, 2023, the City Council authorized Public Works to utilize Imazapyr and Triclopyr for the 2023 Invasive Weed Treatment Project, and awarded a contract to Northwest Aquatic Management, LLC, a licensed applicator in the state of Washington. On May 22, 2023, Northwest Aquatic completed both foliar and direct injection applications of the authorized herbicides for the 2023 Invasive Weed Treatment Services project.

The attached memo outlines the application areas, product specimen labels, and quantities/solutions applied during the 2023 calendar year, pursuant to BIMC 16.30.080.

ATTACHMENTS:

[2023 Annual Pesticide Use Report.pdf](#)

FISCAL DETAILS: N/A

Fund Name(s):

Coding: N/A



CITY OF
BAINBRIDGE ISLAND

PUBLIC WORKS DEPARTMENT

MEMORANDUM

Date: November 30, 2023
To: Peter Corelis, P.E., City Engineer
From: Matthew Oxford, Engineering Project Manager
Subject: 2023 Annual Pesticide/Herbicide Use Report

BACKGROUND

In 2003, the City Council passed Ordinance 2003-15 regulating pest management and pesticide use under BIMC 16.30, to reduce the amount and toxicity of pesticides and herbicides in building and landscape management to a very minimal amount. Since 2003, City staff have adhered to BIMC 16.30 utilizing products on the Least Toxic Products list or seeking City Council approval for any emergency-use authorizations.

Noxious Weed Control in Bainbridge Island was managed by the Kitsap County's Noxious Weed Program and supplemented by the city through an interlocal agreement that was terminated in 2022, which left the City, residents, and landowners without a means to eradicate, control, and prevent the spread of noxious weeds.

ANNUAL PESTICIDE USE

In March 2023, the Cooperative Weed Management Area (CWMA) and the City coordinated an interim noxious weed treatment project to address Poison Hemlock, Japanese Knotweed, Himalayan Blackberry, Scotch Broom, and English Holly within two of the City's largest open space areas: Lost Valley and Waterfront Park.

The CWMA recommended the use of two herbicides, Imazapyr and Triclopyr, for effective treatment and control of the species targeted by the 2023 Invasive Weed Treatment project. These herbicides are used throughout the state by Washington Department of Transportation (WSDOT), and locally by Kitsap County's Noxious Weed Program. Additionally, both herbicides were effectively used on Bainbridge Island by Kitsap County since 2017.

On May 9, 2023, the City Council authorized Public Works to utilize Imazapyr and Triclopyr for the 2023 Invasive Weed Treatment Project, and awarded a contract to Northwest Aquatic Management, LLC, a licensed applicator in the state of Washington.

On May 22, 2023, Northwest Aquatic completed both foliar and direct injection applications of the authorized herbicides for the 2023 Invasive Weed Treatment Services project.

Both Triclopyr 3 and Imazapyr 4SL were mixed to a 2% solution for foliar application to address the target species at Lost Valley and Waterfront Park treatment areas, which are 6.6 acres and 2.0

acres respectively. A total of 32 ounces of each concentrated product was between the two treatment areas. This treatment was highly effective and showed signs of decline (Figure 1) or complete mortality (Figures 2 and 3) within ten days.



Figure 1. Himalayan blackberry along Lost Valley Trail (Image date: May 31, 2023)



Figure 2. Scotch broom in Waterfront Park (Image date: May 31, 2023)



Figure 3. Scotch broom along Waterfront Trail in Waterfront Park (Image date: May 31, 2023)

Mature English Holly at both locations were injected with EZ-JECT Copperhead Herbicide Shells (83.5% Imazapyr) at a rate of 1 shell every 4 inches around the trunk. A total of 150 shells were between the two treatment areas. This treatment was also highly effective and signs of decline in English holly was observed within ten days (Figure 4), with mortality occurring after several months.



***Figure 4.** English holly in Waterfront Park (Image date: May 31, 2023)*

ATTACHMENTS

The following attachments document the application area, product specimen labels, and quantities/solutions applied during the 2023 calendar year, pursuant to BIMC 16.30.080.

Attachment 1: Project Area Exhibits

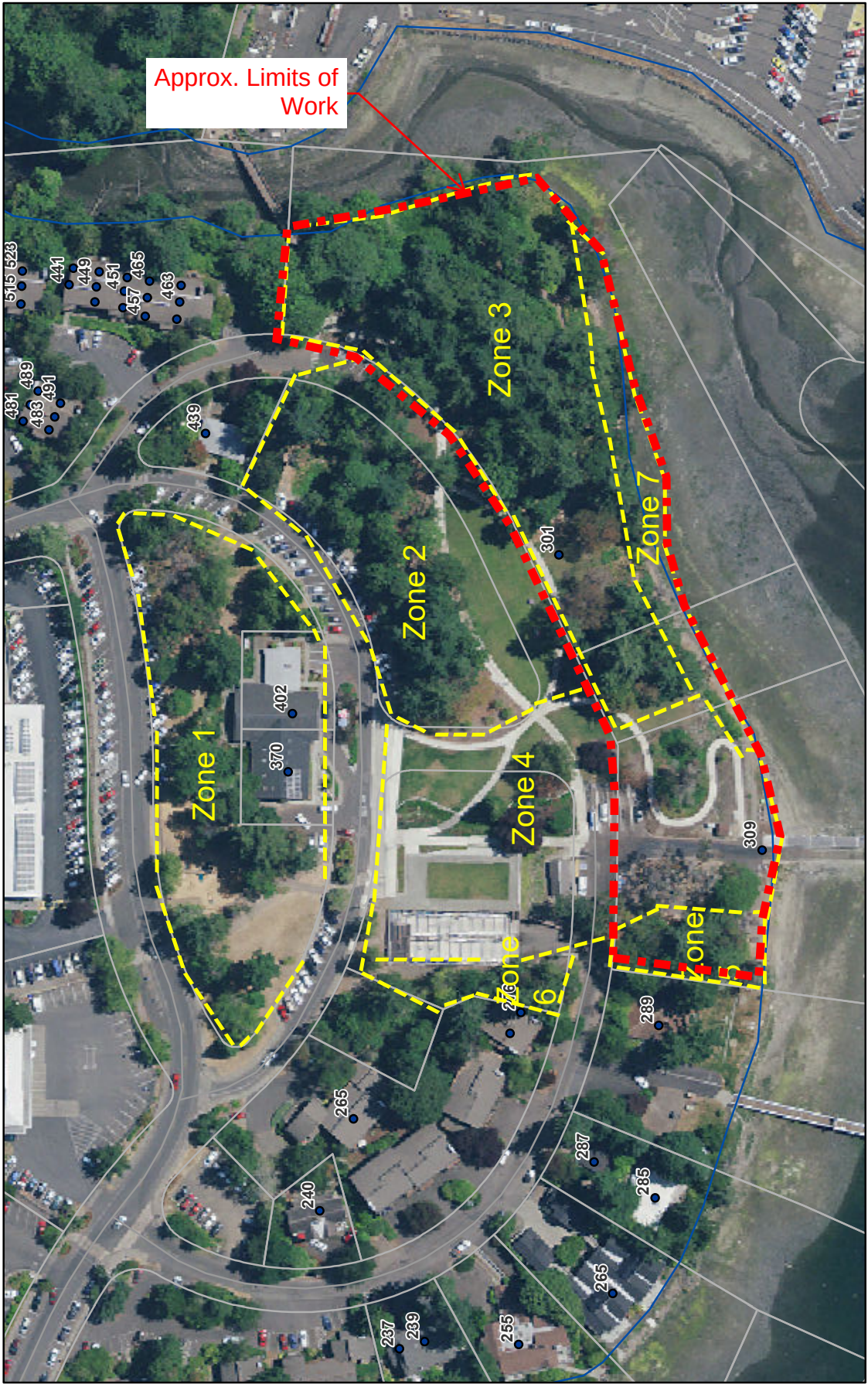
Attachment 2: 2023 Pesticide/Herbicide Use Log

Attachment 3: Product Specimen Labels

ATTACHMENT 1

PROJECT AREA EXHIBITS

EXHIBIT A - WATERFRONT PARK WEED CONTROL PROJECT AREA



6/27/2022, 1:58:42 PM

2018_HXIP_Bainbridge_NAD_1983_2011_StatePlane_Washington_North_FIPS_4601_Ft_US_MG4.sid

- Red: Band_1
- Green: Band_2
- Zone Boundaries

1:2,257

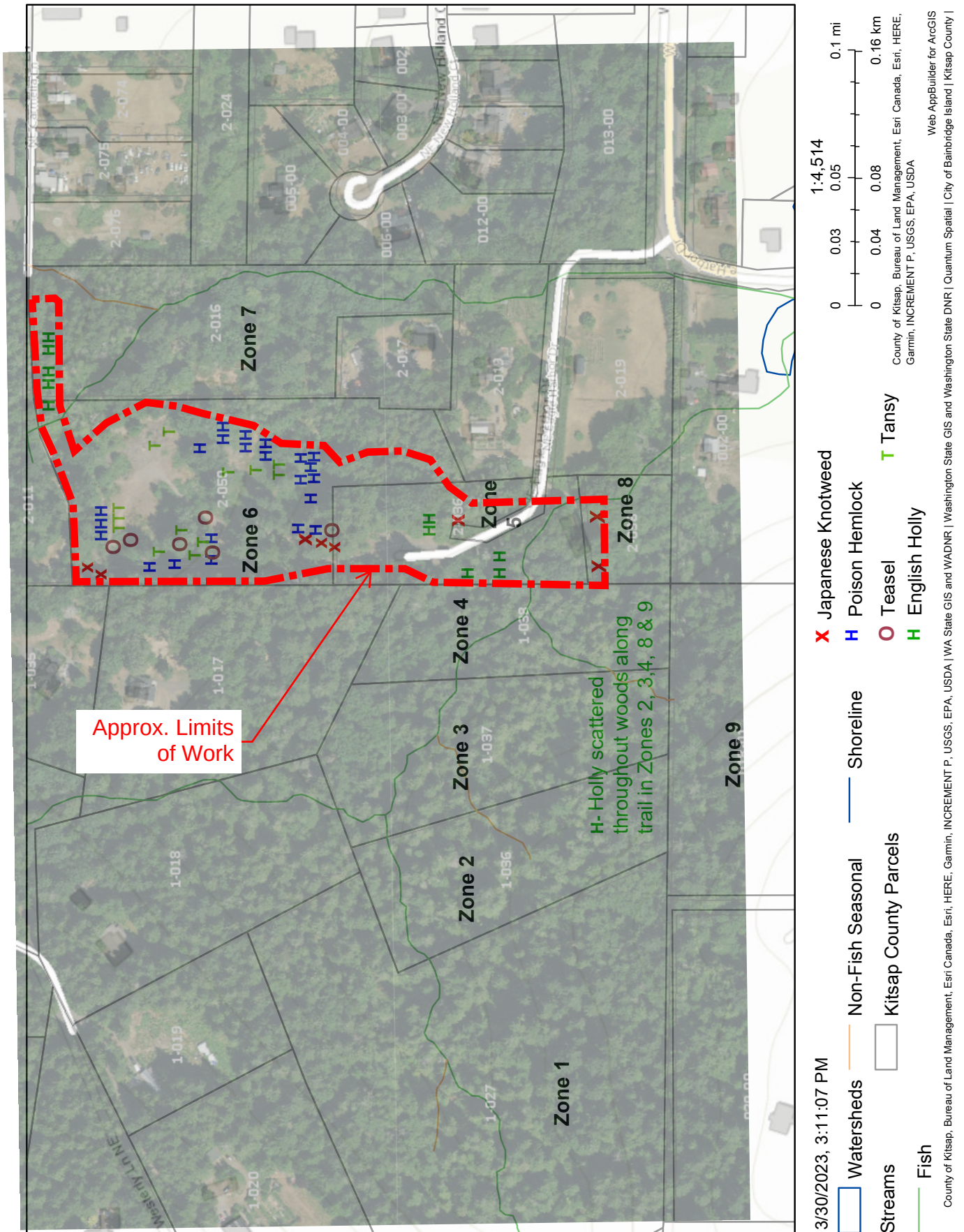
0 0.01 0.03 0.05 mi

0 0.02 0.04 0.08 km

Washington State GIS and Washington State DNR, County of King, County of Kitsap, Bureau of Land Management, Esri, HERE, Garmin,

County of King, County of Kitsap, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA, USDA | WA State GIS and WADNR | Washington State DNR | Kitsap County Copyright (January 2006)

EXHIBIT B - LOST VALLEY WEED CONTROL PROJECT AREA



ATTACHMENT 2
2023 PESTICIDE/HERBICIDE USE LOG

City of Bainbridge Island Pesticide/Herbicide Use Log

[illegible]

ATTACHMENT 3

PRODUCT SPECIMEN LABELS

ALLIGARE

IMAZAPYR 4 SL

SPECIMEN LABEL

For the control of undesirable vegetation in forestry sites, aquatic sites, grass pasture, rangeland, fence rows, maintenance of wildlife openings, and industrial noncropland areas including railroad, utility, pipeline rights-of-way, utility plant sites, petroleum tank farms, pumping installations, storage areas, building perimeters, irrigation and non-irrigation ditchbanks, roads, transmission lines, and industrial bare ground areas.

In the State of New York, aquatic uses are not allowed.

ACTIVE INGREDIENT:

Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)* 52.6%

OTHER INGREDIENTS 47.4%
TOTAL 100.0%

*Equivalent to 42.9% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid or 4 pounds acid per gallon.

EPA Reg. No. 81927-24

KEEP OUT OF REACH OF CHILDREN CAUTION!/PRECAUCION!

PRECAUCION AL USUARIO: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call 1-800-424-9300.	

Manufactured for: Alligare, LLC
13 N. 8th Street • Opelika, AL 36801

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeve shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for all mixers and loaders, plus applicators using handheld equipment

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

User Safety Recommendations:

- Users should wash hands with plenty of soap and water before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas. Do not apply to water except as specified on this label. Treatment of aquatic weeds may result in oxygen depletion or loss due to decomposition of dead plants. Do not treat more than one-half the surface area of the water in a single operation and wait at least 10 to 14 days between treatments. Begin treatments along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas. Do not contaminate water when disposing of equipment washwaters or rinsate. See Directions for Use for additional precautions and requirements.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of **Alligare Imazapyr 4 SL** must be mixed, stored and applied only in stainless steel, fiberglass, plastic, and plastic-lined steel containers.

DO NOT mix, store or apply **Alligare Imazapyr 4 SL** or spray solutions of **Alligare Imazapyr 4 SL** in unlined steel (except stainless steel) containers or spray tanks.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Alligare Imazapyr 4 SL must be used only in accordance with directions on the booklet label. Keep containers closed to avoid spills and contamination.

Alligare Imazapyr 4 SL may be applied using helicopters, ground operated sprayers, low-volume hand-operated spray equipment including back-pack and pump-up sprayers, and tree injection equipment.

Observe all cautions and limitations in the labels of products used in combination with **Alligare Imazapyr 4 SL**.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. The requirements in this box apply to use on trees being grown for sale or other commercial use, or for commercial seed production, or for production of timber or wood products, or for research purposes.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **48 hours**.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas until sprays have dried.

IMPORTANT

DO NOT use on food or feed crops. **DO NOT** use on Christmas trees. **DO NOT** apply this product within one-half mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within one-half mile of an active potable water intake in a standing body of water, including a lake, pond or reservoir. **DO NOT** apply to water used for irrigation except as described in **APPLICATION TO WATERS USED FOR IRRIGATION** section of this label. Keep from contact with fertilizers, insecticides, fungicides, and seeds to prevent unintentional exposure of desirable vegetation to this product. **DO NOT** apply or drain or flush equipment on or near sensitive desirable plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. **DO NOT** apply to lawns. **DO NOT** side trim desirable vegetation with this product unless severe injury and plant death can be tolerated. Prevent drift of spray to desirable plants. Clean application equipment after using this product by thoroughly flushing with water.

IMAZAPYR 4 SL

Specimen Label

RESISTANCE

When herbicides with the same mode of action are used repeatedly over several years to control the same weed species in the same application site, naturally occurring resistant weed biotypes may survive a correctly applied herbicide treatment, propagate and become dominant in that site. These resistant weed biotypes may not be adequately controlled. Using herbicides with different modes of action within these sites can aid in delaying the proliferation and possible dominance of herbicide resistant weed biotypes. It is advisable that each user of this product check with the local extension service for a current list of resistant weed biotypes.

PRODUCT INFORMATION

Alligare Imazapyr 4 SL is an aqueous solution intended to be mixed in water and surfactants(s) and applied as a post-emergent spray for control of most annual and perennial grasses, broadleaf weeds, vines, brambles, hardwood brush, trees for forestry site preparation and release of conifers from woody and herbaceous competition. This product may be used for selective woody and herbaceous weed control in natural regeneration of certain conifers (see pine release). This product may also be mixed in water and used for stump and cut-stem treatment for control of unwanted woody vegetation. This product can be applied along forest roads to control undesirable vegetation. This product can be used for the control of undesirable vegetation along non-irrigation ditchbanks and for the establishment and maintenance of wildlife openings. See use directions for stump and cut stem treatments and herbaceous weed control and use directions for spot treatment of undesirable hardwood vegetation.

This product may be applied on forestry sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in other depressions created by forest management activities, except in the states of California and New York. It is permissible to treat drainage ditches, intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present, except in the states of California and New York. Only the edge of drainage ditches can be treated for drainage ditches that contain water. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas, except in the states of California and New York.

When applied postemergence to weeds, **Alligare Imazapyr 4 SL** will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species.

Alligare Imazapyr 4 SL will provide residual control of labeled weeds which germinate in the treated areas. Postemergence application with a surfactant is the method of choice in most situations, particularly for perennial weeds. For maximum affect, weeds should be growing vigorously at postemergence application and the spray solution should include a surfactant.

Alligare Imazapyr 4 SL solutions may be broadcast by using ground or aerial equipment, or may be applied as a spot treatment by using low-volume techniques. In addition, **Alligare Imazapyr 4 SL** may be used for stump and cut stem treatments.

Alligare Imazapyr 4 SL controls vegetation by absorption through foliage and roots, from which it is translocated rapidly throughout the plant, where it accumulates in rapidly-growing meristematic tissue. Treated plants stop growing soon after spray treatment. Chlorosis (yellowing of plant tissue) first appears in the newest leaves and necrosis spreads from this point. In perennials, **Alligare Imazapyr 4 SL** is translocated into and kills the roots and underground storage tissues to prevent most regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species for several weeks after application and may take months for various woody plants, brush and trees.

PRECAUTIONS FOR AVOIDING INJURY TO NON-TARGET PLANTS

Untreated desirable plants can be affected by root uptake of this product from treated soil. Injury or loss of desirable plants may result if this product is applied on or near desirable plants, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots. When making applications along shorelines where desirable plants may be present, caution should be exercised to avoid spray contact with their foliage or spray application to the soil in which they are rooted. Shoreline plants that have roots that extend into the water in an area where this product has been applied generally will not be adversely affected by uptake of the herbicide from the water.

If treated vegetation is to be removed from the application site, **DO NOT** use the vegetative matter as mulch or compost on or around desirable species.

Untreated trees can occasionally be affected by root uptake of this product through movement into the top soil. Injury or loss of desirable trees or other plants may result if this product is applied on or near desirable trees or other plants, on areas where their roots extend or in locations where the treated soil may be washed or moved into contact with their roots.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Spray drift from applying this product may damage sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

The best drift management strategy and most effective way to reduce drift potential are to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **WIND, TEMPERATURE AND HUMIDITY AND TEMPERATURE INVERSIONS**).

Controlling Droplet Size:

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed,

use higher flow rate nozzles instead of increasing pressure.

- Number of Nozzles – use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application must be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Wind Erosion: Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Aerial Applications:

1. Applicators are required to use a coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a very coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to use a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.
2. Applicators are required to use upwind swath displacement.
3. The boom length must not exceed 60% of the wingspan or 90% of the rotor blade diameter to reduce spray drift.
4. Applications with wind speed less than 3 mph and with wind speeds greater than 10 mph are prohibited.
5. Applications into temperature inversions are prohibited.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Ground Boom Applications:

1. Applicators are required to use a nozzle height below 4 feet above the ground or plant canopy and coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater.
2. Applications with wind speeds greater than 10 mph are prohibited.
3. Applications into temperature inversions are prohibited.

The use of treated waters on irrigated crops within 120 days is prohibited.

ADJUVANTS

Postemergence applications of this product may require the addition of a spray adjuvant for optimum herbicide performance. Only use spray adjuvants that are labeled for the specific use sites. When using for conifer release treatments, please refer to the conifer release section of this label. The addition of a Chemical Producers and Distributors Associations (CPDA) certified adjuvant may increase control. A CPDA certified drift control agent may also be used.

Nonionic Surfactants: Use a nonionic surfactant at the rate of 0.25% v/v or higher (see manufacturer's label) of the spray solution (0.25% v/v is equivalent to 1 quart in 100 gallons). For best results, select a nonionic surfactant with a HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 with at least 90% surfactant in the formulated product (alcohols, fatty acids, oils, ethylene glycol or diethylene glycol should not be considered as surfactants to meet the above requirements).

Methylated Seed Soils or Vegetable Oil Concentrates: Instead of a surfactant, a methylated seed oil or vegetable-based seed oil concentrate may be used at the rate of 1.5 to 2 pints per acre. When using spray volumes greater than 30 gallons per acre, methylated seed oil or vegetable based seed oil concentrates should be mixed at a rate of 1% of the total spray volume, or alternatively use a nonionic surfactant as described above. Research indicates that these oils may aid in product deposition and uptake by plants under moisture or temperature stress.

Silicone Based Surfactants: See manufacturer's label for specific rates instructions. Silicone-based surfactants may reduce the surface tension of the spray droplet, allowing greater spreading on the leaf surface as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly, limiting herbicide uptake.

Invert emulsions: This product can be applied as an invert emulsion. Consult the invert chemical label for proper mixing directions.

Fertilizer/Surfactant Blends: Nitrogen based liquid fertilizers such as 28%N, 32%N, 10-34-0 or ammonium sulfate, may be added at the rate of 2 to 3 pints per acre in combination with the specified rate of nonionic surfactant, methylated seed oil or vegetable/seed oil concentrate. Do not use fertilizers in a tank mix without a nonionic surfactant, methylated seed oil or vegetable/seed oil concentrate.

Other: An antifoaming agent, spray pattern indicator or drift reducing agent may be applied at the product labeled rate if necessary or desired.

WEEDS CONTROLLED

Alligare Imazapyr 4 SL provides postemergence control and some residual control of the following target weed species. The degree of control is both species and rate dependent. Use **Alligare Imazapyr 4 SL** only in accordance with the directions on this label.

GRASSES:

The species of annual and perennial grasses controlled by **Alligare Imazapyr 4 SL** include the following:

Annual bluegrass (*Poa annua*)
Bahigrass (*Paspalum notatum*)
Barnyardgrass (*Echinochloa crus-galli*)
Beardgrass (*Andropogon* spp.)
Bermudagrass (*Cynodon dactylon*)¹
Big bluestem (*Andropogon gerardii*)
Broadleaf signalgrass (*Brachiaria platyphylla*)
Canada bluegrass (*Poa compressa*)
Cattail (*Typha* spp.)
Cheat (*Bromus secalinus*)
Cogongrass (*Imperata cylindrica*)²
Crabgrass (*Digitaria* spp.)
Crowfootgrass (*Dactyloctenium aegyptium*)
Dallisgrass (*Paspalum dilatatum*)
Downy brome (*Bromus tectorum*)
Fall panicum (*Panicum dichotomiflorum*)
Feathertop (*Pennisetum villosum*)
Fescue (*Festuca* spp.)
Foxtail (*Setaria* spp.)
Giant reed (*Arundo donax*)
Goosegrass (*Eleusine indica*)
Guineagrass (*Panicum maximum*)
Italian ryegrass (*Lolium multiflorum*)
Itchgrass (*Rottboellia exaltata*)
Johnsongrass (*Sorghum halepense*)¹
Junglerice (*Echinochloa colonum*)
Kentucky bluegrass (*Poa pratensis*)
Lovegrass (*Eragrostis* spp.)¹
Orchardgrass (*Dactylis glomerata*)
Panicum spp.
Paragrass (*Brachiaria mutica*)
Phragmites (*Phragmites australis*)
Prairie cordgrass (*Spartina pectinata*)
Prairie threeawn (*Aristida oligantha*)
Quackgrass (*Agropyron repens*)
Reed canarygrass (*Phalaris arundinacea*)
Saltgrass (*Distichlis stricta*)
Sand dropseed (*Sporobolus cryptandrus*)
Sandbur (*Cenchrus* spp.)
Smooth brome (*Bromus inermis*)
Sprangletop (*Leptochloa* spp.)
Timothy (*Phleum pratense*)
Torpedograss (*Panicum repens*)
Vaseygrass (*Paspalum urvillei*)
Wild barley (*Hordeum* spp.)
Wild oats (*Avena fatua*)
Wirestem muhly (*Muhlenbergia frondosa*)
Witchgrass (*Panicum capillare*)
Woolly cupgrass (*Eriochloa villosa*)

¹ Use higher labeled rates.

² Use minimum of 24 oz. per acre.

BROADLEAF WEEDS:

The species of annual and perennial broadleaf weeds controlled by **Alligare Imazapyr 4 SL** include the following:

Arrowwood (*Pluchea sericea*)
Broom snakeweed (*Gutierrezia sarothrae*)
Bull thistle (*Cirsium vulgare*)
Burclover (*Medicago* spp.)
Burdock (*Arctium* spp.)

Camphorweed (*Heterotheca subaxillaris*)
Canada thistle (*Cirsium arvense*)
Carolina geranium (*Geranium carolinianum*)
Carpetweed (*Mullugo verticillata*)
Chickweed, mouseear (*Cerastium vulgatum*)
Clover (*Trifolium* spp.)
Cocklebur (*Xanthium strumarium*)
Common chickweed (*Stellaria media*)
Common ragweed (*Ambrosia artemisiifolia*)
Cudweed (*Gnaphalium* spp.)
Dandelion (*Taraxacum officinale*)
Desert camelthorn (*Alhagi pseudalhagi*)
Diffuse knapweed (*Centaurea diffusa*)
Dock (*Rumex* spp.)
Dogfennel (*Eupatorium capillifolium*)
Fiddleneck (*Amsinckia intermedia*)
Filaree (*Erodium* spp.)
Fleabane (*Erigeron* spp.)
Giant ragweed (*Ambrosia trifida*)
Goldenrod (*Solidago* spp.)
Gray rabbitbrush (*Chrysothamnus nauseosus*)
Henbit (*Lamium alexiclaude*)
Hoary vervain (*Verbena stricta*)
Horseweed (*Conyza canadensis*)
Indian mustard (*Brassica juncea*)
Japanese bamboo/knotweed (*Polygonum cuspidatum*)
Knotweed, prostrate (*Polygonum aviculare*)
Kochia (*Kochia scoparia*)
Lambsquarters (*Chenopodium album*)
Little mallow (*Malva parviflora*)
Milkweed (*Asclepias* spp.)
Miners lettuce (*Montia perfoliata*)
Mullein (*Verbascum* spp.)
Nettleleaf goosefoot (*Chenopodium murale*)
Oxeye daisy (*Chrysanthemum leucanthemum*)
Pepperweed (*Lepidium* spp.)
Pigweed (*Amaranthus* spp.)
Plantain (*Plantago* spp.)
Pokeweed (*Phytolacca americana*)
Primrose (*Oenothera kunthiana*)
Puncturevine (*Tribulus terrestris*)
Purple loosestrife (*Lythrum salicaria*)
Purslane (*Portulaca* spp.)
Pusley, Florida (*Richardia scabra*)
Rocket, London (*Sisymbrium irio*)
Rush skeletonweed (*Chondrilla juncea*)
Russian knapweed (*Centaurea repens*)
Russian thistle (*Salsola kali*)
Saltbush (*Atriplex* spp.)
Shepherd's purse (*Capsella bursa-pastoris*)
Silverleaf nightshade (*Solanum elaeagnifolium*)
Smartweed (*Polygonum* spp.)
Sorell (*Rumex* spp.)
Sowthistle (*Sonchus* spp.)
Spurge, annual (*Euphorbia* spp.)
Stinging nettle (*Urtica dioica*)
Sunflower (*Helianthus* spp.)
Sweet clover (*Mellilotus* spp.)
Tansymustard (*Descurainia pinnata*)
Texas thistle (*Cirsium texanum*)
Velvetleaf (*Abutilon theophrasti*)
Western ragweed (*Ambrosia psilostachya*)
Wild carrot (*Daucus carota*)
Wild lettuce (*Lactuca* spp.)
Wild parsnip (*Pastinaca sativa*)
Wild turnip (*Brassica campestris*)
Woollyleaf bursage (*Ambrosia grayi*)
Yellow starthistle (*Centaurea solstitialis*)
Yellow woodsorrel (*Oxalis stricta*)

VINES AND BRAMBLES:

The species of vines and brambles controlled by **Alligare Imazapyr 4 SL** include the following:

Field bindweed (*Convolvulus arvensis*)
Hedge bindweed (*Calystegia sepium*)
Honeysuckle (*Lonicera* spp.)¹
Morningglory (*Ipomoea* spp.)
Poison ivy (*Rhus radicans*)
Redvine (*Brunnichia cirrhosa*)
Trumpet creeper (*Campsis radicans*)
Virginia creeper (*Parthenocissus quinquefolia*)
Wild buckwheat (*Polygonum convolvulus*)
Wild grape (*Vitis* spp.)
Wild rose (*Rosa* spp.)¹
Including: Multiflora rose (*Rosa multiflora*)
Macartney rose (*Rosa bracteata*)

¹ Use higher labeled rates.

IMAZAPYR 4 SL

Specimen Label

WOODY BRUSH AND TREES:

The species of woody brush and trees controlled by **Alligare Imazapyr 4 SL** include the following:

Alder (*Alnus* spp.)
American beech (*Fagus grandifolia*)
Ash (*Fraxinus* spp.)¹
Aspen (*Populus* spp.)
Autumn olive (*Elaeagnus umbellata*)
Bald cypress (*Taxodium distichum*)
Bigleaf Maple (*Acer macrophyllum*)
Birch (*Betula* spp.)¹
Black oak (*Quercus kelloggii*)
Blackgum (*Nyssa sylvatica*)²
Boxelder (*Acer negundo*)
Brazilian peppertree (*Schinus terebinthifolius*)
Ceanothus (*Ceanothus* spp.)
Cherry (*Prunus* spp.)²
Chinaberry (*Melia azedarach*)
Chinese tallow-tree (*Sapium sebiferum*)
Chinquapin (*Castanopsis chrysophylla*)
Cottonwood (*Populus trichocarpa* and *Populus deltoides*)
Cypress (*Taxodium* spp.)
Dogwood (*Cornus* spp.)¹
Eucalyptus (*Eucalyptus* spp.)
Hawthorn (*Crataegus* spp.)
Hickory (*Carya* spp.)¹
Huckleberry (*Gaylussacia* spp.)
Lyonia spp.
Including: Fetterbush (*Lyonia lucida*)
Staggerbush (*Lyonia mariana*)
Madrone (*Arbutus menziesii*)
Maple (*Acer* spp.)
Melaleuca (*Melaleuca quinquenervia*)
Mulberry (*Morus* spp.)^{1,3}
Oak (*Quercus* spp.)⁴
Persimmon (*Diospyros virginiana*)²
Poison oak (*Rhus diversiloba*)
Popcorn-tree (*Sapium sebiferum*)
Poplar (*Populus* spp.)
Privet (*Ligustrum vulgare*)
Red Alder (*Alnus rubra*)
Red Maple (*Acer rubrum*)
Saltcedar (*Tamarix pentandra*)
Sassafras (*Sassafras albidum*)
Sourwood (*Oxydendrum arboreum*)²
Sumac (*Rhus* spp.)
Sweetgum (*Liquidambar styraciflua*)
Sycamore (*Platanus occidentalis*)
Tanoak (*Lithocarpus densiflorus*)¹
Titi (*Cyrilla racemiflora*)⁵
Tree of heaven (*Ailanthus altissima*)
Vaccinium spp.
Including: Blueberry (*Vaccinium* spp.)
Sparkleberry (*Vaccinium arboreum*)
Willow (*Salix* spp.)
Yellow poplar (*Liriodendron tulipifera*)¹

¹ Use higher labeled rates.

² Best control with applications prior to formation of fall leaf color.

³ The degree of control may be species dependent.

⁴ For Water oak (*Quercus nigra*), Laurel oak (*Q. lauriflora*), Willow oak (*Q. phellos*) and Live oak (*Q. virginiana*) use higher labeled rates.

⁵ Suppression only.

MIXING AND APPLICATION INSTRUCTIONS

HELICOPTER EQUIPMENT:

Thoroughly mix the specified amount of **Alligare Imazapyr 4 SL** in 5 to 30 gallons of water per acre and apply uniformly with properly calibrated helicopter equipment. Use a nonionic surfactant to improve weed control. A drift control agent may be used at its specified label rate. An anti-foam agent may be added, if needed. Exercise all precautions to minimize or eliminate spray drift. Avoid applications during windy or gusty conditions. Use of a Microfoil™ boom, Thru-Valve™ boom, raindrop nozzles, controlled droplet booms and nozzle configurations is recommended. Maintain adequate buffer zones to minimize potential impacts to desirable vegetation.

IMPORTANT: **DO NOT** make applications by fixed wing aircraft.

Thoroughly clean mixing and application equipment by thoroughly flushing with water immediately after using this product. Prolonged exposure of uncoated/unpainted steel (except stainless steel) surfaces to this product may result in corrosion and failure of the exposed part. Maintaining painted surfaces may prevent corrosion.

GROUND EQUIPMENT:

Thoroughly mix and apply the specified amount of **Alligare Imazapyr 4 SL** in 5 to 100 gallons of water per acre. Use a nonionic surfactant to enhance weed control. A drift control agent and an anti-foam agent may also be added at the specified label rates, if needed. If desired, a spray pattern indicator may be used at the specified label rate. To minimize spray drift, select proper nozzles to avoid spraying a fine mist, use pressures less than 50 psi and **DO NOT** spray under gusty or windy conditions (also refer to **SPRAY DRIFT MANAGEMENT** section). Maintain adequate buffer zones to minimize potential impacts to desirable vegetation.

For best results, apply the spray solution to uniformly cover the foliage of the undesirable vegetation to be controlled.

Clean mixing and application equipment immediately after using this product by thoroughly flushing with water.

FOLIAR APPLICATIONS

Low Volume Foliar:

For low volume, select proper nozzles to avoid over-application. Moisten, but do not drench target vegetation causing spray solution to run off. Proper application is critical to ensure desirable results. Best results are achieved when the spray covers the crown and approximately 70 percent of the plant.

DIRECTED FOLIAR OR SPOT SPRAY EQUIPMENT:

For directed or spot spray applications with helicopter, ground equipment or low-volume hand-operated spray equipment, thoroughly mix 1.0 to 5.0% **Alligare Imazapyr 4 SL** by volume (v/v) in water with at least 1/4% nonionic surfactant by volume, according to the table below.

MIXING GUIDE FOR ALLIGARE IMAZAPYR 4 SL

SOLUTION VOLUME	Alligare Imazapyr 4 SL CONCENTRATION (%)			NONIONIC SURFACTANT
	1.0	2.5	5.0	
1 gallon	1-1/3 oz.	3-1/3 oz.	6-2/3 oz.	1/3 oz.
5 gallons	6-2/3 oz.	1 pint	2 pints	1-2/3 oz.
10 gallons	13-1/3 oz.	2 pints	4 pints	3-1/3 oz.
25 gallons	2 pints	5 pints	10 pints	8 oz.
100 gallons	1 gal.	2.5 gal.	5 gal.	2 pints

2 tablespoons = 1 fluid ounce

For optimum performance and efficacy, apply spray to uniformly cover the target vegetation foliage. Direct spray to avoid contacting desirable conifers. Avoid direct application to desired plant species as injury may occur.

IMPORTANT: **DO NOT** over apply to cause run-off from treated foliage. **DO NOT** exceed specified dosage rate per acre.

CUT STUBBLE:

This product can be applied within 2 weeks after mechanical mowing or cutting of brush. To suppress or control resprouting, uniformly apply a spray solution of this product at the rate of 1 to 2 pints per acre to the cut area. This product may be tank-mixed with picloram, or equivalent labeled product for this use to aid in control or suppression of brush. The addition of 5% (v/v) or more of a penetrating agent can aid in uptake through the bark or exposed roots.

Cut stubble applications are made to the soil and cut brush stumps. This type of application may increase ground cover injury. However, vegetation will recover. Making applications of this product directly to the soil can increase potential root uptake causing injury or death of desirable trees.

Efficacy can be increased and root uptake by desirable vegetation can be decreased if the brush is allowed to regrow and the foliage is treated. See the Brush Control section of this label.

STUMP AND CUT STEM TREATMENTS

Alligare Imazapyr 4 SL will control undesirable woody vegetation in forest management when applied as a water solution to the cambium area of freshly-cut stump surfaces or to cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the spring. Tree injection and cut stem treatments are most effective in late summer and early fall. **DO NOT** over-apply to cause run-off or puddling of spray solution.

MIXING:

Mix **Alligare Imazapyr 4 SL** as either a concentrate or dilute solution for stump and cut stem treatments. Apply dilute solutions to the surface of the stump or to cuts on the stem of the target woody vegetation. Apply concentrate solutions to cuts on the stem. Use of the concentrate solutions permits application to fewer cuts on the stem, especially for large diameter trees. Follow the application directions below to determine proper application techniques for each type of solution.

To prepare a dilute solution, mix 4 to 6 fluid ounces of **Alligare Imazapyr 4 SL** with one gallon of water. Except in the state of California, if temperatures are such that freezing of the spray mixture may occur, antifreeze (ethylene glycol) may be added according to manufacturer's label to prevent freezing. The use of a surfactant or penetrating agent may improve herbicide uptake through partially callused cambium tissue.

To prepare a concentrated solution, use undiluted **Alligare Imazapyr 4 SL** product or mix up to 75% water, by volume.

APPLICATION WITH DILUTE SOLUTIONS:

For cut stump treatments: Spray or brush the solution onto the cambium area of the freshly cut stump surface. Thoroughly wet the entire cambium area (the wood next to the bark of the stump).

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than one inch intervals between cut edges. Insure that the injector completely penetrates the bark at each injection site.

For frill or girdle treatments: Use a hatchet, machete or similar implement to make cuts through the bark around the tree at intervals no more than two inches between cut edges. Spray or brush **Alligare Imazapyr 4 SL** solution into each cut until thoroughly wet.

IMAZAPYR 4 SL

Specimen Label

APPLICATION WITH CONCENTRATED SOLUTIONS:

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site. Make at least one injection cut for every three inches of Diameter at Breast Height (DBH) on the target tree. For example, a three inch DBH tree will receive 1 injection cut while a six inch DBH tree will receive 2 injection cuts. On trees requiring more than one injection site, place the injection cuts at approximately equal intervals around the tree.

For hack and squirt treatments: Use a hatchet, machete or similar implement to make cuts at a downward angle completely through the bark and cambium at approximately equal intervals around the tree. Make at least one cut for every 3 inches of DBH on the target tree as described above, using a squirt bottle, syringe, or similar device apply about 1 milliliter of concentrate solution into each cut, ensuring that the solution does not run out of the cut.

NOTE: Injury may occur to desirable woody plants if the shoots extend from the same root system or their root systems are grafted to those of the treated tree.

SITE PREPARATION TREATMENTS

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

Alligare Imazapyr 4 SL will control labeled grass and broadleaf weeds, vines, brambles, woody brush and trees on forest sites when applied before replanting the following conifer crop species:

Crop Species	Rate (fl. oz./A)
Loblolly Pine (<i>Pinus taeda</i>)	24 - 40
Loblolly X Pitch Hybrid	24 - 40
Longleaf Pine (<i>Pinus palustris</i>)	24 - 40
Shortleaf Pine (<i>Pinus echinata</i>)	24 - 40
Virginia Pine (<i>Pinus virginiana</i>)	24 - 40
Slash Pine (<i>Pinus elliotii</i>)	20 - 32
Douglas-Fir (<i>Pseudotsuga menziesii</i>)	12 - 24
Coastal Redwood (<i>Sequoia sempervirens</i>)	12 - 24
Western Hemlock (<i>Tsuga heterophylla</i>)	12 - 24
California Red Fir (<i>Abies magnifica</i>)	12 - 20
California White Fir (<i>Abies concolor</i>)	12 - 20
Jack Pine (<i>Pinus banksiana</i>)	12 - 16
Lodgepole Pine (<i>Pinus contorta</i>)	12 - 16
Pitch Pine (<i>Pinus rigida</i>)	12 - 16
Ponderosa Pine (<i>Pinus ponderosa</i>)	12 - 16
Sugar Pine (<i>Pinus lambertiana</i>)	12 - 16
White Pine (<i>Pinus strobus</i>)	12 - 16
Black Spruce (<i>Picea mariana</i>)	12 - 16
Red Spruce (<i>Picea rubens</i>)	12 - 16
White Spruce (<i>Picea glauca</i>)	12 - 16

Apply the specified rate of **Alligare Imazapyr 4 SL** per acre as a broadcast foliar spray for long-term control of labeled woody plants and residual control of herbaceous annual and perennial weeds. Within 4 to 6 weeks of treatment, herbaceous weeds will be controlled and may provide fuel to facilitate a site preparation burn for controlling conifers or other species tolerant to the herbicide.

For helicopter applications, apply the specified rate of **Alligare Imazapyr 4 SL** per acre in 5 to 30 gallons total spray solution. For mechanical ground sprays and backpack applications, apply the specified rate of **Alligare Imazapyr 4 SL** per acre in 5 to 100 gallons total spray solution. Use at least 1/2% percent by volume nonionic surfactant. Use the higher label rates of **Alligare Imazapyr 4 SL** and higher spray volumes to control especially dense, multi-layered canopies of hardwood stands or difficult to control species.

Tank mixes may be necessary to control conifers and other species that are tolerant to **Alligare Imazapyr 4 SL**. Observe all precautions and restrictions on the tank mix partner label. Always follow the most restrictive label. NOTE that some other products labeled for forest site preparation may kill plants such as legumes and blackberry that are desirable for wildlife habitat.

Where quick initial brown out (deadening of foliage) is desired for burning, apply a tank mixture of 16 to 32 fluid oz. **Alligare Imazapyr 4 SL** plus 16 to 64 fluid oz. Accord® or 16 to 48 fluid oz. Garlon 4™ per acre. To control seedling pines, apply 16 to 32 fluid oz. **Alligare Imazapyr 4 SL** plus 3 to 4 quarts Accord®. For site preparation, rates less than 24 oz. **Alligare Imazapyr 4 SL** will provide suppression of hardwood brush and trees; however, some resprouting may occur.

DO NOT plant seedlings of Black Spruce (*Picea mariana*) or White Spruce (*Picea glauca*) on sites that have been broadcast treated with **Alligare Imazapyr 4 SL** or into the treated zone of spot or banded applications for at least three months after treatment or injury may occur.

HERBACEOUS WEED CONTROL

Use **Alligare Imazapyr 4 SL** for selective weed control in the following conifers:

Crop Species	Rate (fl. oz./A)
Loblolly Pine (<i>Pinus taeda</i>)	6 - 10
Loblolly X Pitch Hybrid	6 - 10
Virginia Pine (<i>Pinus virginiana</i>)	6 - 10
Longleaf Pine (<i>Pinus palustris</i>) ¹	4 - 6
Shortleaf Pine (<i>Pinus echinata</i>) ¹	4 - 6
Slash Pine (<i>Pinus elliotii</i>) ¹	4 - 6
Douglas-Fir (<i>Pseudotsuga menziesii</i>) ¹	4 - 6

¹ Use of surfactant is not recommended.

Alligare Imazapyr 4 SL may be broadcast, banded over tree rows or directed for release of young conifers from herbaceous weeds. To diminish the possibility of conifer injury, **DO NOT** apply **Alligare Imazapyr 4 SL** when conifers are under stress from drought, diseases, animal or winter injury, planting shock or other stresses that may reduce conifer vigor. Broadcast applications may be made by helicopter, ground or backpack sprayer. For best results, apply **Alligare Imazapyr 4 SL** to newly emerged weeds. Use the higher labeled rates for hard-to-control weeds. Where herbaceous weeds have over-topped conifer seedlings, add a nonionic surfactant at up to 1/4% of the spray solution volume to improve weed control (except for Slash Pine, Longleaf Pine, and Douglas-fir). Conifers in the treated area may exhibit minor growth inhibition, especially when treatments are applied during periods of active conifer growth.

Alligare Imazapyr 4 SL may also be applied by backpack or hand-held sprayers to control herbaceous weeds around individual conifer seedlings. Mix 0.4 to 0.6 fluid oz. **Alligare Imazapyr 4 SL** and 0.2 fluid oz. nonionic surfactant per gallon of water. Direct the spray to the weeds and minimize spray contact with conifer seedlings to avoid seedling damage. **DO NOT** exceed the maximum labeled rates listed above.

Alligare Imazapyr 4 SL can also be tank mixed with a sulfometuron-methyl product to broaden the weed control spectrum. For loblolly pine only, apply 4 to 6 fluid oz. **Alligare Imazapyr 4 SL** plus a sulfometuron-methyl product at the specified label rate per acre. Application of **Alligare Imazapyr 4 SL** plus Oust® to other conifer species, however, may cause growth suppression.

CONIFER RELEASE TREATMENTS

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

Alligare Imazapyr 4 SL may be applied as a broadcast or directed spray to suppress the labeled brush, tree and herbaceous weed species. In conifer stands of all ages, use directed low-volume sprays onto unwanted vegetation and avoid direct contact to the conifers. **DO NOT** exceed the maximum labeled rates listed below.

Use broadcast applications of **Alligare Imazapyr 4 SL** for release of the following conifers from hardwood competition:

Crop Species	Rate (fl. oz./A)
Loblolly Pine (<i>Pinus taeda</i>) ¹	12 - 20
Loblolly X Pitch Hybrid ¹	12 - 20
Virginia Pine (<i>Pinus virginiana</i>) ¹	12 - 20
Longleaf Pine (<i>Pinus palustris</i>)	12 - 16
Pitch Pine (<i>Pinus rigida</i>)	12 - 16
Shortleaf Pine (<i>Pinus echinata</i>)	12 - 16
Slash Pine (<i>Pinus elliotii</i>)	12 - 16
White Pine (<i>Pinus strobus</i>) ¹	8 - 16
California Red Fir (<i>Abies magnifica</i>)	8 - 12
California White Fir (<i>Abies concolor</i>)	8 - 12
Lodgepole Pine (<i>Pinus contorta</i>) ¹	8 - 12
Douglas-Fir (<i>Pseudotsuga menziesii</i>) ¹	8 - 12
Jack Pine (<i>Pinus banksiana</i>) ¹	6 - 12
Black Spruce (<i>Picea mariana</i>) ¹	6 - 12
Red Spruce (<i>Picea rubens</i>) ¹	6 - 12
White Spruce (<i>Picea glauca</i>) ¹	6 - 12

¹ **DO NOT** make applications to white pine stands younger than three years old. To minimize potential injury to White Pine, release treatments must not be made prior to July 15.

² Applications must be made after formation of final conifer resting buds in the fall or height growth inhibition may occur.

³ Mid-rotation release: For broadcast applications below the pine canopy in established stands of Loblolly Pine, Loblolly X pitch hybrid, and Virginia Pine use 16-32 oz. product per acre. For mid-rotation release of other species use rates listed above.

Apply the specified rate of **Alligare Imazapyr 4 SL** per acre when applying broadcast sprays by helicopter or ground spray equipment. Refer to mixing and application instructions for proper spray volumes. A nonionic surfactant may be added but at no more than 1/4% by volume of the finished spray. Use the higher label rates of **Alligare Imazapyr 4 SL** when controlling especially dense stands or hard to control species.

Conifers may exhibit some minor growth inhibition when release treatments are made during periods of active conifer growth. To minimize potential growth inhibition, **DO NOT** make broadcast applications to conifer stands, except loblolly pine, before the end of the second growing season and, then, not until late in the growing season. To reduce the possibility of conifer injury, **DO NOT** apply **Alligare Imazapyr 4 SL** when conifers are under stress from drought, diseases, animal or winter injury, or other stresses that reduce conifer vigor.

For release of loblolly pine seedlings during the first growing season following planting or for one-year-old natural loblolly pine regeneration: For one-year-old loblolly pine release, apply 12-20 fluid oz./A **Alligare Imazapyr 4 SL** after July 15. Use rates below 16 fluid oz./A for growth suppression of hardwoods; however, some hardwood resprouting should be expected.

For release of 2-to-5 year old slash pine and longleaf pine from undesirable woody plants: Broadcast release treatments over the top of pines after August 15 and only in stands 2 to 5 years old. **DO NOT** add surfactant to the spray solution and use the lower labeled rates on areas with sandy soils.

For release of slash pine over 5 years old by aerial application: Apply ONLY after September 15 after height growth has stopped and buds have set. Use 12 to 14 fluid oz. **Alligare Imazapyr 4 SL** per acre but only 12 fluid oz on areas with sandy soils. **DO NOT** add surfactant to the spray solution. **DO NOT** over apply by overlapping the spray pattern or dressing up around the edges of a tract. Since this treatment may cause some inhibition in height growth or terminal dieback, it should not be used if such affects are unacceptable.

IMAZAPYR 4 SL

Specimen Label

For use ONLY in Maine for release of Jack Pine, Black Spruce, Red Spruce and White Spruce: For hardwood growth suppression, apply **Alligare Imazapyr 4 SL** at rates less than 6 fluid oz. per acre when tank mixed with glyphosate. Use a nonionic surfactant at rates greater than 0.25% v/v. The use of **Alligare Imazapyr 4 SL** with more than 0.25% v/v non-ionic surfactant can result in conifer growth inhibition or mortality, and must not be used if this type of conifer injury is unacceptable.

The use of **Alligare Imazapyr 4 SL** rates below 6 oz./A are intended for hardwood brush growth suppression and hardwood brush resprouting should be expected.

USE FOR SPOT TREATMENT OF UNDESIRABLE BRUSH AND HARDWOOD VEGETATION

Apply **Alligare Imazapyr 4 SL** as a directed foliar or cut stem application in conifer stands of all ages for the conifer species listed above. Mix and apply as described above for directed foliar or cut stem applications. **DO NOT** exceed the maximum labeled rates listed above. Cut stem applications may be used for spot treatment of undesirable hardwoods in Ponderosa Pine stands using 12 oz. or less of product per acre.

Avoid direct spray contact to desired plant species as injury may occur. Injury may occur to non-target or desirable hardwoods or conifers if they extend from the same root system or their root systems are grafted to those of the treated tree or if their roots extend into the treated zone.

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

LATE ROTATION VEGETATION CONTROL IN WESTERN CONIFERS

In California, the Pacific Northwest and Inland Northwest, broadcast aerial applications of this product up to 24 fl. oz./A are permissible in conifer stands that are targeted for harvesting the year following treatment. Use minimum spray volume of 15 gallons per acre. Do not use this treatment if conifer injury or mortality cannot be tolerated.

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

BAG AND SPRAY APPLICATIONS FOR CONIFER RELEASE

In Douglas fir and Ponderosa pine stands, broadcast applications of this product up to 16 fl. oz./A are permissible when the trees are covered by bags prior to the application. The bags must prevent the spray mix from contacting the conifer foliage. On sites with coarse textured soils (e.g., decomposed granite, pumice, sandy or rocky sites) or low levels of soil organic matter (generally 5% or less) significant conifer growth inhibition and mortality is possible. Do not use this treatment on these types of sites if conifer growth inhibition and mortality cannot be tolerated.

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

AQUATIC USE SECTION USE PRECAUTIONS AND RESTRICTIONS FOR AQUATICS

In the state of New York, Aquatic Uses are Not Allowed.

Applications may only be made for the control of undesirable emergent and floating aquatic vegetation in and around standing and flowing water, including estuarine and marine sites. Applications may be made to control undesirable wetland, riparian and terrestrial vegetation growing in or around surface water.

Aerial application is restricted to helicopter only.

Application of this product can only be made by federal or state agencies, such as Water Management District personnel, municipal officials and the U.S. Army Corps of Engineers, or those applicators who are licensed or certified as aquatic pest control applicators and are authorized by the state or local government.

Applications to private water: Applications may be made to private waters that are still, including ponds, lakes and drainage ditches where there is minimal or no outflow to public waters.

Application to public waters: Applications may be made to public waters including ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, streams, rivers, and other slow-moving or quiescent bodies of water for control of aquatic weeds or for control of riparian and wetland weed species.

Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.

Recreational Use of Water in Treatment Area: There are no restrictions on the use of water in the treatment area for recreational purposes, including swimming and fishing.

Livestock Use of Water in/from Treatment Area: There are no restrictions on livestock consumption of water from the treatment area.

Precautions for Potable Water Intakes: Do not apply this product directly to water within one-half mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within one-half mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within one-half mile of active potable water intakes, the water intake must be turned off during application and for a minimum of 48 hours after the application. These aquatic applications may be made only in the cases where there are alternative water sources or holding ponds, which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. Note: Existing potable water intakes which are no longer in use, such as those replaced by connections to wells or a municipal water system, are not considered to be active potable water intakes. This restriction does not apply to intermittent, inadvertent over spray of water in terrestrial use sites.

APPLICATION TO WATERS USED FOR IRRIGATION

The use of treated waters on irrigated crops within 120 days of treatment is prohibited.

Seasonal Irrigation Water: This product may be applied during the off-season to surface waters that are used for irrigation on a seasonable basis, provided that there is a minimum of 120 days between product application and the first use of treated water for irrigation purposes or until product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

Irrigation Canals/Ditches: Do not apply this product to irrigation canals/ditches unless the 120-day restriction on irrigation water usage can be observed or product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less. Do not apply this product to dry irrigation canals/ditches.

Quiescent or Slow Moving Waters: In lakes and reservoirs DO NOT apply this product within one (1) mile of an active irrigation water intake during the irrigation season. Applications less than one (1) mile from an active irrigation water intake may be made during the off-season, provided that the irrigation intake will remain active for a minimum 120 days after application or until product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

Moving Water: Do not apply within one-half mile downstream of an active irrigation water intake. When making applications upstream from an active irrigation water intake, the intake must be turned off for a period of time sufficient to allow the upstream portion of treated water to completely flow past the irrigation intake before use can resume. Shut off time will be determined by the speed of water flow and the distance and length of water treated upstream from the intake. Consult local, state and/or federal authorities before making any applications upstream from an active irrigation water intake.

Use Sites: This product is an aqueous solution to be mixed with water and a surfactant and applied as a spray solution to control floating and emergent undesirable vegetation (see AQUATIC WEEDS CONTROLLED section and the ADDITIONAL WEEDS CONTROLLED section) in or near bodies of water which may be flowing, non-flowing, or transient. This product may be applied to specified aquatic sites that include lakes, rivers, streams, ponds, seeps, drainage ditches, canals, reservoirs, swamps, bogs, marshes, estuaries, bays, brackish water, transitional areas between terrestrial and aquatic sites and seasonal wet areas. See AQUATIC USE section of this label for precautions, restrictions, and instructions on aquatic uses.

Read and observe the following directions if aquatic sites are present in terrestrial non-crop areas and are part of the intended treatment area:

Herbicidal Activity: This product will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species with some residual control of undesirable species that germinate above the waterline. This product is readily absorbed through emergent leaves and stems and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into, and kills, underground or submerged storage organs, which prevents regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species until two or more weeks after application. Complete kill of plants may not occur for several weeks. Performance of this product may be reduced if rainfall occurs within 2 hours of application. **This product does not control plants which are completely submersed or have a majority of their foliage under water.**

Application Methods: This product must be applied to the emergent foliage of the target vegetation and has little to no activity on submerged aquatic vegetation. Product concentrations resulting from direct application to water are not expected to be of sufficient concentration or duration to provide control of target vegetation. Application must be made in such a way as to maximize spray interception by the target vegetation while minimizing the amount of over spray that enters the water. For maximum activity, weeds should be growing vigorously at the time of application and the spray solution should include a surfactant (See ADJUVANTS section for specific recommendations). This product may be selectively applied by using low-volume directed application techniques or may be broadcast-applied by using ground equipment, watercraft or by helicopter. In addition, this product may also be used for cut stump, cut stem and frill and girdle treatments within aquatic sites (see AERIAL APPLICATIONS and GROUND APPLICATIONS sections for additional details).

This product must be applied with surface or helicopter application equipment in a minimum of 5 gallons of water per acre. When applying by helicopter, follow directions under the AERIAL APPLICATIONS section of this label; otherwise refer to section on GROUND APPLICATIONS when using surface equipment.

Applications made to moving bodies of water should be made while travelling upstream to prevent concentration of this herbicide in water. Do not apply to bodies of water or portions of bodies of water where emergent and/or floating weeds do not exist.

When application is to be made to target vegetation that covers a large percentage of the surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in the suffocation of some sensitive aquatic organisms. Do not treat more than one half of the surface area of the water in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas.

Apply this product at 1 to 3 pints per acre depending on species present and weed density. Do not exceed the maximum label rate of 3 pints per acre (1.5 lb. ai/A) per year. Use the higher labeled rates for heavy weed pressure. Consult the AQUATIC WEEDS CONTROLLED section and the ADDITIONAL WEEDS CONTROLLED section of this label for specific rates.

This product may be applied as a draw down treatment in areas described above. Apply this product to weeds after water has been drained and allow 14 days before reintroduction of water.

IMAZAPYR 4 SL

Specimen Label

AQUATIC SPECIES CONTROLLED

This product will control the following target species as specified in the INSTRUCTIONS section of the table. Rates are expressed in terms of product volume for broadcast applications and as a percent solution for directed applications including spot treatments. For percent solution applications, DO NOT apply more than the equivalent of 1.5 quarts of this product per acre.

COMMON NAME	SCIENTIFIC NAME	INSTRUCTIONS
Floating Species		
*Duckweed	<i>Lemna minor</i>	1 – 1 ½ pints/acre (1% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Duckweed, Giant	<i>Spirodela polyrriza</i>	1 – 1 ½ pints/acre (1% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Frogbit	<i>Limnobiium spongia</i>	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Spatterdock	<i>Nuphar luteum</i>	Apply a tank-mix of 1-2 pints/acre of this product + 4-6 pints/acre glyphosate (0.5% this product + 1.5% glyphosate) in 100 GPA water for best control. Ensure 100% coverage of actively growing, emergent foliage.
*Water Hyacinth	<i>Eichhornia crassipes</i>	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water to actively growing foliage.
*Water Lettuce	<i>Pistia stratiotes</i>	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
Emergent Species		
*Alligatorweed	<i>Alternanthera philoxeroides</i>	½ – 2 pints/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage. Tank-mix with glyphosate is NOT recommended, and may reduce alligatorweed control, requiring higher product rates.
*Arrowhead, Duck-potato	<i>Sagittaria</i> spp.	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Bacopa, lemon	<i>Bacopa</i> spp.	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Parrot feather	<i>Myriophyllum aquaticum</i>	Must be foliage above water for sufficient product uptake. Apply 1 – 2 pints to actively growing emergent foliage.
*Pennywort	<i>Hydrocotyle</i> spp.	½ – 1 pint/acre (0.5% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Pickerelweed	<i>Pontederia cordata</i>	1 – 1½ pints/acre (1% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Taro, wild; Dasheen; Elephant's Ear; Coco Yam	<i>Colocasia esculentum</i>	2 – 3 pints/acre (1.5% solution) applied in 100 GPA with a high quality 'sticker' adjuvant. Ensure good coverage of actively growing, emergent foliage.
*Water lily	<i>Nymphaea odorata</i>	1 – 1 ½ pints/acre (1% solution) applied in 100 GPA water mix. Ensure 100% coverage of actively growing, emergent foliage.
*Water primrose	<i>Ludwigia uruguayensis</i>	2 – 3 pints/acre (1.5% solution), ensure 100% coverage of actively growing, emergent foliage. Do not tank-mix with glyphosate as this may reduce water primrose control.
Terrestrial/Marginal		
*Soda Apple, aquatic, Nightshade	<i>Solanum tampanicense</i>	1 pint/acre applied to foliage
*Bamboo, Japanese	<i>Phyllostachys</i> spp.	1 ½ – 2 pints/acre applied to the foliage when plant is actively growing. Before setting seed head. More foliage will result in greater herbicide uptake, resulting in greater root kill.
Brazilian Pepper; Christmasberry	<i>Schinus terebinthifolius</i>	1 – 2 pints/acre applied to foliage.
Cattail	<i>Typha</i> spp.	1 – 2 pints (1% solution) applied to actively growing, green foliage after full leaf elongation. Lower rates will control cattail in the north; higher rates are needed in the south.
Chinese Tallow Tree	<i>Sapium sebiferum</i>	8 – 12 ounces applied to foliage.
Cogongrass	<i>Imperata cylindrica</i>	Burn foliage, till area, that Fall spray 1 quart/acre this product + MSO applied to new growth.
Cordgrass, prairie	<i>Spartina</i> spp.	2 – 3 pints applied to actively growing foliage.
Cutgrass	<i>Zizaniopsis miliacea</i>	2 – 3 pints applied to actively growing foliage.

COMMON NAME	SCIENTIFIC NAME	INSTRUCTIONS
*Elephant Grass; Napier Grass	<i>Pennisetum purpureum</i>	1½ pints/acre applied to actively growing foliage.
*Flowering rush	<i>Butumu typla</i>	1 – 1½ pints applied to actively growing foliage.
Giant Reed, Wild Cane	<i>Arundo donax</i>	2 – 3 pints/acre applied in spring to actively growing foliage.
*Golden Bamboo	<i>Phyllostachys aurea</i>	1½ – 2 pints/acre applied to the foliage when plant is actively growing before plants set seed heads. More foliage will result in greater herbicide uptake, resulting in greater root kill.
Junglerice	<i>Echinochloa colonum</i>	1½ – 2 pints applied to actively growing foliage.
Knapweeds	<i>Centaurea species</i>	Russian Knapweed – 1 to 1½ pints + 1 quart/acre MSO fall applied after senescence begins
Knotweed, Japanese (see Fallopia japonica)	<i>Polygonum cuspidatum</i>	1½ – 2 pints/acre applied postemergence to actively growing foliage.
Melaleuca; Paperbark Tree	<i>Melaleuca quinquenervia</i>	For established stands, apply 2 pints/acre of this product + 6 pints/acre glyphosate + spray adjuvant. For best results, use 4 quarts/A methylated seed oil as an adjuvant. For ground foliar application, uniformly apply to ensure 100% coverage. For broadcast foliar control, apply aerially in a minimum of two passes at 10 gallons/acre applied cross treatment. For spot treatment, use a 25% solution of this product + 25% solution of glyphosate + 1.25% MSO in water applied as a frill or stump treatments.
*Nutgrass; Kili'p'opu	<i>Cyperus rotundus</i>	1 pint of this product + 1 quart/acre MSO applied early postemergence.
*Nutsedge	<i>Cyperus</i> spp.	1 – 1½ pints postemergence to foliage or pre-emergence incorporated, non-incorporated pre-emergence applications will not control.
Phragmites; Common Reed	<i>Phragmites australis</i>	1½ – 2 pints/acre applied to actively growing, green foliage after full leaf elongation, ensure 100% coverage. If stand has a substantial amount of old stem tissue, mow or burn, allow to regrow to approximately 5' tall before treatment. Lower rates will control phragmites in the north; higher rates are needed in the south.
*Poison Hemlock	<i>Conium maculatum</i>	1 pint of this product + 1 quart/acre MSO applied pre-emergence to early postemergence to rosette, prior to flowering.
Purple Loosestrife	<i>Lythrum salicaria</i>	½ pint/acre applied to actively growing foliage.
Reed canarygrass	<i>Phalaris arundinacea</i>	1½ – 2 pints/acre applied to actively growing foliage.
Rose, swamp	<i>Rosa palustris</i>	1 – 1½ pints/acre applied to actively growing foliage.
Russian-Olive	<i>Elaeagnus angustifolia</i>	1 – 2 pints/acre or a 1% solution, applied to foliage.
Saltcedar; Tamarisk	<i>Tamarix species</i>	Aerial apply 1 quart of this product + 0.25% v/v NIS applied to actively growing foliage during flowering. For spot spraying, use 1% solution of this product + 0.25% v/v NIS and spray to wet foliage. After application, wait at least two years before disturbing treated saltcedar. Earlier disturbance can reduce overall control.
Smartweed	<i>Polygonum</i> spp.	1 pint/acre applied early postemergence.
Sumac	<i>Rhus</i> spp.	1 – 1½ pints/acre applied to foliage.
Swamp Morning Glory; Water Spinach; Kangkong	<i>Ipomoea aquatic</i>	½ – 1 pint/acre of this product + 1 quart/ acre MSO applied early postemergence.
Torpedo Grass	<i>Panicum repens</i>	2 pints/acre (1 – 1.5% solution), ensure good coverage to actively growing foliage.
*White Top; Hoary Cress	<i>Cardaria draba</i>	½ – 1 pint/acre of this product applied to actively growing foliage, ensure good coverage.
Willow	<i>Salix</i> spp.	1 – 1 ½ pints/acre of this product applied to actively growing foliage, ensure good coverage.

*Not approved for use in California.

TANK MIXES

This product may be tank mixed with other aquatic use herbicides for the control of emergent and floating aquatic vegetation provided that the tank mix herbicide label does not prohibit such mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

TANK MIXES FOR WEED AND BRUSH CONTROL

This product may be tank mixed with other registered herbicide products to provide control of species tolerant to this product.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Tank mixing with 2,4-

IMAZAPYR 4 SL

Specimen Label

D or products which contain 2,4-D could result in reduced performance of this product when 2,4-D is used at high rates.

INVERT EMULSIONS:

This product can be applied as an invert emulsion. Consult the invert chemical label for proper mixing directions.

FOR CONTROL OF UNDESIRABLE WEEDS UNDER PAVED SURFACES

This product can be used under asphalt, pond liners and other paved areas ONLY in industrial sites or where the pavement has a suitable barrier along the perimeter that prevents encroachment of roots of desirable plants.

This product must be used only where the area to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or other vegetative plant parts are present in the site, they should be removed by scalping with a grader blade to a depth sufficient to ensure their complete removal.

IMPORTANT: Paving should follow applications of this product as soon as possible. DO NOT apply where the chemical may contact the root of desirable trees or other plants.

Do not use this product under pavement on residential properties including driveways or parking lots, nor in recreational areas including under bike or jogging paths, golf cart paths, or tennis courts, or where the landscape plantings could be anticipated.

Injury or death of desirable plants may result if this product is applied where roots are present or where they may extend into the treated area. Roots of trees and shrubs may extend a considerable distance beyond the branch extremities or so-called drip line.

APPLICATION DIRECTIONS FOR PAVED SURFACES:

Applications must be made to the soil surface only when final grade is established. Do not move soil following application of this product. Apply this product in sufficient water (at least 100 gals. per acre) to ensure thorough and uniform wetting of the soil surface, including the shoulder areas. Add this product at a rate of 3 pints per acre (1.1 fluid ounces per 1000 square feet) to clean water in the spray tank during the filling operation. Agitate before spraying.

If the soil is not moist prior to treatment, incorporation of this product is needed for herbicide activation. This product can be incorporated into the soil to a depth of 4 to 6 inches using a rototiller or disc. Rainfall or irrigation of 1 inch will also provide uniform incorporation. Do not allow treated soil to wash or move into untreated areas.

FOR CONTROL OF UNDESIRABLE WEEDS IN UNIMPROVED DORMANT BERMUDAGRASS AND BAHIAGRASS

This product may be used on unimproved dormant bermudagrass and bahiagrass turf on roadsides and utility rights-of-way. The application of this product on established common and coastal bermudagrass and bahiagrass provides control of labeled broadleaf and grass weeds. Competition from these weeds is eliminated, releasing the bermudagrass and bahiagrass. Treatment of bermudagrass with this product results in a compacted growth habit and seedhead inhibition.

Uniformly apply with properly calibrated ground equipment using at least 10 gallons of water per acre with a spray pressure 20 to 50 psi.

IMPORTANT: Temporary yellowing of grass may occur when treatment is made after growth commences. DO NOT add surfactant in excess of the specified rate (1 fluid ounce per 25 gallons of spray solution). DO NOT APPLY to grass during its first growing season. DO NOT APPLY to grass that is under stress from drought, disease, insects, or other causes.

DOSAGE RATES AND TIMING:

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

Bermudagrass – Apply this product at 3 to 6 fluid ounces per acre when the bermudagrass is dormant. Apply this product at 3 to 4 fluid ounces per acre after the bermudagrass has reached full green-up. Applications made during green-up will delay green-up. Include a surfactant in the spray solution (see **IMPORTANT** statement above).

For additional pre-emergence control of annual grasses and small seeded broadleaf weeds, add Endurance® or Pendulum® herbicide at the rate of 3.3 to 6.6 pounds per acre. Consult the Endurance® or Pendulum® label for weeds controlled and for other use directions and precautions.

For control of johnsongrass in bermudagrass turf, apply this product at 4 fluid ounces per acre plus a registered herbicide with addition of an approved surfactant. For additional control of broadleaves and vines, a registered herbicide may be added to the above mix at the rate of 1 to 2 pints per acre. Observe all precautions and restrictions of the labels.

Bahiagrass – Apply this product at 2 to 4 fluid ounces per acre when the bahiagrass is dormant or after the grass has initiated green-up but has not exceeded 25% green-up. Include in the spray solution a surfactant (See Adjuvant section for specific recommendations on surfactants).

WEEDS CONTROLLED

Bedstraw (*Galium* spp.)
Bishopweed (*Ptilimnium capillaceum*)
Buttercup (*Ranunculus parviflorus*)
Carolina geranium (*Geranium carolinianum*)
Fescue (*Festuca* spp.)
Foxtail (*Setaria* spp.)
Little barley (*Hordeum pusillum*)
Seedling Johnsongrass (*Sorghum halepense*)
Wild carrot (*Daucus carota*)
White clover (*Trifolium repens*)
Yellow woodsorrel (*Oxalis stricta*)

GRASS GROWTH AND SEEDHEAD SUPPRESSION

This product may be used to suppress growth and seedhead development of certain turfgrasses in unimproved areas. When applied to desirable turf, this product may result in temporary turf damage, death, and/or discoloration. Effects to the desirable turf may vary with environmental conditions. For optimum performance, application should be made prior to culm elongation. Applications may be made before or after mowing. If applied prior to mowing, allow at least three days of active growth before mowing. If following a mowing, allow sufficient time for the grasses to recover before applying this product or injury may be amplified.

DO NOT APPLY to turf under stress (drought, cold, insect damaged, etc) or severe injury or death may occur.

Bermudagrass – Apply this product at 3 to 4 fluid ounces per acre from early green-up to prior to seedhead initiation. DO NOT add a surfactant for this application.

Cool Season Unimproved Turf – Apply this product at 1 fluid ounce per acre plus 0.25% nonionic surfactant. For increased suppression, this product may be tank-mixed with other products suitable for this use.

Tank-mixes may increase injury to desired turf. Consult each product label for recommended turf species and other use directions and precautions. Tank mixes with 2,4-D or products containing 2,4-D at higher rates may decrease the effectiveness of this product.

TOTAL VEGETATION CONTROL WHERE BAREGROUND IS DESIRED

This product is an effective herbicide for preemergence or postemergence control of many annual and perennial broadleaf and grass weeds where bare ground is desired. This product is particularly effective on hard-to-control perennial grasses. This product at 0.75 to 3 pints per acre can be used alone or in tank mix with Diuron, Simazine, Vanquish®, or other registered herbicides labeled for this use. The degree and duration of control are dependent on the rate of this product used, tank-mix partner, the volume of carrier, soil texture, rainfall and other conditions.

Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank-mixes.

Applications of these products may be made anytime of the year. Use equipment calibrated to deliver desired gallons per acre spray volume and uniformly distribute the spray pattern over the treated area.

Postemergence Applications: Always use a spray adjuvant (See ADJUVANTS section of this label) when making a postemergence application. For optimum performance on tough to control annual grasses, apply 100 gallons per acre or less. For spot treatments, this product may be used as a follow-up treatment to control escapes or weed encroachment in a bare ground situation. To prepare the spray solution, thoroughly mix in each gallon of water 0.5 to 5% of this product plus an adjuvant.

Restriction: Do not apply more than 1.5 lbs. acid equivalent (ae) imazapyr (equivalent to 48 fl. oz. of **Alligare Imazapyr 4 SL**) per acre per year.

FOR SPOT TREATMENT WEED CONTROL IN GRASS PASTURE AND RANGELAND

For the control of undesirable vegetation in grass pasture and rangeland this product may be applied as a spot treatment at a rate of 1 to 24 fluid ounces of product per treated acre using any of the described ground application methods. Spot applications to grass pasture and rangeland may not exceed more than one tenth of the area to be grazed or cut for hay. See appropriate sections of this label for specific use directions for the application method and vegetation control desired. DO NOT apply more than 48 fluid ounces per acre per year.

Grazing and haying restrictions: There are no grazing restrictions following application of this product. DO NOT cut forage grass for hay for seven days after application of this product.

GUIDELINES FOR RANGELAND USE

This product may be applied to rangeland for the control of undesirable vegetation in order to achieve one or more of the following vegetation management objectives:

1. The control of undesirable (non-native, invasive and noxious) plant species.
2. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland plant species.
3. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland vegetation following a fire.
4. The control of undesirable vegetation for purposes of wildlife fuel reduction.
5. The release of existing desirable rangeland plant communities from the competitive pressure of undesirable plant species.
6. The control of undesirable vegetation for purposes of wildlife habitat improvement.

To ensure the protection of threatened and endangered plants when applying this product to rangeland:

1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
2. State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
3. Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

ROTATIONAL CROP INSTRUCTIONS

Rotational crops may be planted twelve months after applying this product at the specified pasture and rangeland rate. Following twelve months after an application of this product, and before planting any crop, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted in the previously treated area in the grass pasture/rangeland and grown to maturity. The test strip should include low areas and knolls, and include variations in soil type and pH within the treated area. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year.

Use of this product in accordance with label directions is expected to result in normal growth or rotational crops in most situations; however, various environmental and agronomic factors make it possible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

ADDITIONAL WEEDS CONTROLLED

In terrestrial sites, this product will provide preemergence or postemergence control with residual control of the following target vegetation species at the rates listed. Residual control refers to control of newly germinating seedlings in both annuals and perennials. In general, annual weeds may be controlled by preemergence or postemergence applications of this product. Use a post-emergence application of this product to established biennials and perennials.

The rates shown below pertain to broadcast applications and indicate the relative sensitivity of these weeds. The relative sensitivity should be referenced when preparing low volume spray solutions (see Low Volume section of Ground Applications); low volume applications may provide control of the target species with less product per acre than is shown for the broadcast treatments. This product must be used only in accordance with the directions on this label.

The relative sensitivity of the species listed below can also be used to determine the relative risk of causing non-target plant injury if any of the below listed species are considered to be desirable within the area to be treated.

Resistant Biotypes: Naturally occurring biotypes (a plant within a given species that has a slightly different, but distinct, genetic makeup from other plants of the same species) of some weeds listed on this label may not be effectively controlled. If naturally occurring resistant biotypes are present in an area, this product should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

GRASSES

COMMON NAME	SPECIES	GROWTH HABIT ²
Apply 1.0 – 1.5 pints per acre¹		
Annual bluegrass	(<i>Poa annua</i>)	A
Broadleaf signalgrass	(<i>Brachiaria platyphylla</i>)	A
Canada bluegrass	(<i>Poa compressa</i>)	P
Downy brome	(<i>Bromus tectorum</i>)	A
Fescue	(<i>Festuca</i> spp.)	A/P
Foxtail	(<i>Setaria</i> spp.)	A
Italian ryegrass	(<i>Lolium multiflorum</i>)	A
Johnsongrass	(<i>Sorghum halepense</i>)	P
Kentucky bluegrass	(<i>Poa pratensis</i>)	P
Lovegrass	(<i>Eragrostis</i> spp.)	A/P
*Napier grass	(<i>Pennisetum purpureum</i>)	P
Orchardgrass	(<i>Dactylis glomerata</i>)	P
Paragrass	(<i>Brachiaria mutica</i>)	P
Quackgrass	(<i>Agropyron repens</i>)	P
Sandbur	(<i>Cenchrus</i> spp.)	A
Sand dropseed	(<i>Sporobolus cryptandrus</i>)	P
Smooth brome	(<i>Bromus inermis</i>)	P
Vaseygrass	(<i>Paspalum urvillei</i>)	P
Wild oats	(<i>Avena fatua</i>)	A
Witchgrass	(<i>Panicum capillare</i>)	A
Apply 1.5 – 2.0 pints per acre¹		
Barnyardgrass	(<i>Echinochloa crus-gali</i>)	A
Beardgrass	(<i>Andropogon</i> spp.)	P
Bluegrass, Annual	(<i>Poa annua</i>)	A
*Bulrush	(<i>Scirpus validus</i>)	A
Cheat	(<i>Bromus secalinus</i>)	A
Crabgrass	(<i>Digitaria</i> spp.)	A
Crowfootgrass	(<i>Dactyloctenium aegyptium</i>)	A
Fall panicum	(<i>Panicum dichotomiflorum</i>)	A
Giant Reed	(<i>Arundo donax</i>)	A
Goosegrass	(<i>Eleusine indica</i>)	A
Itchgrass	(<i>Rottboellia exaltata</i>)	A
Junglerice	(<i>Echinochloa colonum</i>)	A
Lovegrass	(<i>Eragrostis</i> spp.)	A
*Maidencane	(<i>Panicum hemitomom</i>)	A
Panicum, Browntop	(<i>Panicum tasciculatum</i>)	A
Panicum, Texas	(<i>Panicum texanum</i>)	A
Prairie threeawn	(<i>Aristida oligantha</i>)	P
Reed canarygrass	(<i>Phalaris arundinacea</i>)	P
Sandbur, Field	(<i>Cenchrus incertus</i>)	A
Signalgrass	(<i>Brachiaria platyphylla</i>)	A
Torpedograss	(<i>Panicum repens</i>)	P
Wild barley	(<i>Hordeum</i> spp.)	A
Wooly Cupgrass	(<i>Eriochloa villosa</i>)	A
Apply 2.0 – 3.0 pints per acre¹		
Bahiagrass	(<i>Paspalum notatum</i>)	P
Bermudagrass ³	(<i>Cynodon dactylon</i>)	P
Big bluestem	(<i>Andropogon gerardii</i>)	P
Cattail	(<i>Typha</i> spp.)	P
Cogongrass	(<i>Imperata cylindrical</i>)	P
Dallisgrass	(<i>Paspalum dilatatum</i>)	P
Feathertop	(<i>Pennisetum villosum</i>)	P
Guineagrass	(<i>Panicum maximum</i>)	P
Phragmites	(<i>Phragmites australis</i>)	P
Prairie cordgrass	(<i>Spartina pectinata</i>)	P
Saltgrass ³	(<i>Distichlis stricta</i>)	P
Sand dropseed	(<i>Sporobolus cryptandrus</i>)	P
Sprangletop	(<i>Leptochloa</i> spp.)	A
Timothy	(<i>Phleum pratense</i>)	P
Wirestem muhly	(<i>Muhlenbergia frondosa</i>)	P

BROADLEAF WEEDS

COMMON NAME	SPECIES	GROWTH HABIT ²
Apply 1.0 – 1.5 pints per acre¹		
Alligatorweed	(<i>Alternanthera philoxeroides</i>)	A/P
Burdock	(<i>Arctium</i> spp.)	B
Goosegrass	(<i>Eleusine indica</i>)	A
Camphorweed	(<i>Heterotheca subaxillaris</i>)	P
Carolina geranium	(<i>Geranium carolinianum</i>)	A
Clover	(<i>Trifolium</i> spp.)	A/P
Common chickweed	(<i>Stellaria media</i>)	A
Common ragweed	(<i>Ambrosia artemisiifolia</i>)	A
Dandelion	(<i>Taraxacum officinale</i>)	P
Dog fennel	(<i>Eupatorium capillifolium</i>)	A
Filaree	(<i>Erodium</i> spp.)	A
Fleabane	(<i>Erigeron</i> spp.)	A
Hoary vervain	(<i>Verbena stricta</i>)	P
Horseweed	(<i>Coryza canadensis</i>)	A
Indian mustard	(<i>Brassica juncea</i>)	A
Kochia	(<i>Kochia scoparia</i>)	A
Lambsquarters	(<i>Chenopodium album</i>)	A
*Lespedeza	(<i>Lespedeza</i> spp.)	P
Miners lettuce	(<i>Montia perfoliata</i>)	A
Mullein	(<i>Verbascum</i> spp.)	B
Nettleleaf goosefoot	(<i>Chenopodium murale</i>)	A
Oxeye daisy	(<i>Chrysanthemum leucanthemum</i>)	P
Pepperweed	(<i>Lepidium</i> spp.)	A
Pigweed	(<i>Amaranthus</i> spp.)	A
Plantain	(<i>Plantago</i> spp.)	P
Puncturevine	(<i>Tribulus terrestris</i>)	A
Russian thistle	(<i>Salsola kali</i>)	A
Smartweed	(<i>Polygonum</i> spp.)	A/P
Sorrell	(<i>Rumex</i> spp.)	P
Sunflower	(<i>Helianthus</i> spp.)	A
Sweet clover	(<i>Melilotus</i> spp.)	A/B
Tansymustard	(<i>Descurainia pinnata</i>)	A
Western ragweed	(<i>Ambrosia psilostachya</i>)	P
Wild carrot	(<i>Daucus carota</i>)	B
Wild lettuce	(<i>Lactuca</i> spp.)	A/B
Wild parsnip	(<i>Pastinaca sativa</i>)	B
Wild turnip	(<i>Brassica campestris</i>)	B
Woollyleaf bursage	(<i>Franseria tomentosa</i>)	P
Yellow woodsorrel	(<i>Oxalis stricta</i>)	P
Apply 1.5 – 2.0 pints per acre¹		
Broom snakeweed ⁴	(<i>Gutierrezia sarothrae</i>)	P
Bull thistle	(<i>Cirsium vulgare</i>)	B
Burclover	(<i>Medicago</i> spp.)	A
Chickweed, Mouseear	(<i>Cerastium vulgatum</i>)	A
Clover, Hop	(<i>Trifolium procumbens</i>)	A
Cocklebur	(<i>Xanthium strumarium</i>)	A
Cudweed	(<i>Gnaphalium</i> spp.)	A
Desert Camelthorn	(<i>Alhagi pseudalhagi</i>)	P
Diffuse knapweed	(<i>Centaurea diffusa</i>)	A
Dock	(<i>Rumex</i> spp.)	P
Fiddleneck	(<i>Amsinckia intermedia</i>)	A
Goldenrod	(<i>Solidago</i> spp.)	P
Henbit	(<i>Lamium alexicalcaule</i>)	A
Knotweed, prostrate	(<i>Polygonum aviculare</i>)	A/P
Pokeweed	(<i>Phytolacca americana</i>)	P
Purple loosestrife	(<i>Lythrum salicaria</i>)	P
Purslane	(<i>Portulaca</i> spp.)	A
Pusley, Florida	(<i>Richardia scabra</i>)	A
Rocket, London	(<i>Sisymbrium irio</i>)	A
Rush skeletonweed ⁴	(<i>Chondrilla juncea</i>)	B
Saltbrush	(<i>Atriplex</i> spp.)	A
Shepherd's-purse	(<i>Capsella bursa-pastoris</i>)	A
Spurge, Annual	(<i>Euphorbia</i> spp.)	A
Stinging nettle ⁴	(<i>Urtica dioica</i>)	P
Velvetleaf	(<i>Abutilon theophrasti</i>)	A
Yellow starthistle	(<i>Centaurea solstitialis</i>)	A
Apply 2.0 – 3.0 pints per acre¹		
Arrowweed	(<i>Pluchea sericea</i>)	A
Canada thistle	(<i>Cirsium arvense</i>)	P
Giant ragweed	(<i>Ambrosia trifida</i>)	A
Grey rabbitbrush	(<i>Chrysothamnus nauseosus</i>)	P
Little mallow	(<i>Malva parviflora</i>)	B
Milkweed	(<i>Asclepias</i> spp.)	P
Primrose	(<i>Oenothera kunthiana</i>)	P
Russian knapweed	(<i>Centaurea repens</i>)	P
Silverleaf nightshade	(<i>Solanum eleagnifolium</i>)	P
Sowthistle	(<i>Sonchus</i> spp.)	A
Texas thistle	(<i>Cirsium texanum</i>)	P

VINES AND BRAMBLES		
COMMON NAME	SPECIES	GROWTH HABIT ²
	Apply 0.5 pint per acre	
Field bindweed	(<i>Convolvulus arvensis</i>)	P
Hedge bindweed	(<i>Calystegia sepium</i>)	A
	Apply 1.0 – 1.5 pints per acre¹	
Wild buckwheat	(<i>Polygonum convolvulus</i>)	P
	Apply 1.5 – 2.0 pints per acre¹	
Greenbriar	(<i>Smilax</i> spp.)	P
Honeysuckle	(<i>Lonicera</i> spp.)	P
Morningglory	(<i>Ipomoea</i> spp.)	A/P
Poison ivy	(<i>Rhus radicans</i>)	P
Redvine	(<i>Brunnichia cirrhosa</i>)	P
Wild rose	(<i>Rosa</i> spp.)	P
Including: Multiflora rose	(<i>Rosa multiflora</i>)	P
McCartney rose	(<i>Rosa bracteata</i>)	P
	Apply 2.0 – 3.0 pints per acre¹	
Blackberry	(<i>Rubus</i> spp.)	P
Dewberry	(<i>Rubus</i> spp.)	P
*Kudzu ³	(<i>Pueraria lobata</i>)	P
Trumpet creeper	(<i>Campsis</i>)	P
Virginia creeper	(<i>Parthenocissus quinquefolia</i>)	P
Wild grape	(<i>Vitis</i> spp.)	P

BRUSH SPECIES		
COMMON NAME	SPECIES	GROWTH HABIT ²
	Apply 2.0 – 3.0 pints per acre¹	
American beech	(<i>Fagus grandifolia</i>)	P
Ash	(<i>Fraxinus</i> spp.)	P
Bald cypress	(<i>Taxodium distichum</i>)	P
Bigleaf maple	(<i>Acer macrophyllum</i>)	P
Black locust ⁴	(<i>Robinia pseudoacacia</i>)	P
Blackgum	(<i>Nyssa sylvatica</i>)	P
Boxelder	(<i>Acer negundo</i>)	P
Brazilian peppertree	(<i>Schinus terebinthifolius</i>)	P
Cherry	(<i>Prunus</i> spp.)	P
Chinaberry	(<i>Melia azadarach</i>)	P
Chinese tallowtree	(<i>Sapium sebiferum</i>)	P
Dogwood	(<i>Cornus</i> spp.)	P
Elm ⁵	(<i>Ulmus</i> spp.)	P
Hawthorn	(<i>Crataegus</i> spp.)	P
Hickory	(<i>Carya</i> spp.)	P
Honeylocust ⁶	(<i>Gleditsia triacanthos</i>)	P
Maple	(<i>Acer</i> spp.)	P
Melaleuca	(<i>Melaleuca quiquenervia</i>)	P
Mulberry	(<i>Morus</i> spp.)	P
Oak	(<i>Quercus</i> spp.)	P
Persimmon	(<i>Diospyros virginiana</i>)	P
*Pine ⁶	(<i>Pinus</i> spp.)	P
Poplar	(<i>Populus</i> spp.)	P
Privet	(<i>Ligustrum vulgare</i>)	P
Red Alder	(<i>Alnus rubra</i>)	P
Red Maple	(<i>Acer rubrum</i>)	P
Rubber rabbitbrush	(<i>Chrysothamnus nauseosus</i>)	P
Russian Olive	(<i>Eleagnus angustifolia</i>)	P
Sassafras	(<i>Sassafras albidum</i>)	P
Salcedar	(<i>Tamarix ramosissima</i>)	P
Sourwood	(<i>Oxydendrum arboreum</i>)	P
Sumac	(<i>Rhus</i> spp.)	P
Sweetgum	(<i>Liquidambar styraciflua</i>)	P
*Water willow	(<i>Justica americana</i>)	P
Willow	(<i>Salix</i> spp.)	P
Yellow poplar	(<i>Liriodendron tulipifera</i>)	P

¹Not approved for use in California

²The higher rates must be used where heavy or well-established infestations occur.

³Growth Habit – A=Annual, B=Biennial, P=Perennial

⁴Use a minimum of 75 GPA – Control of established stands may require repeat applications

⁵For best results, early postemergence applications are required.

⁶Tank-mix with glyphosate or triclopyr.

⁷Tank-mix with glyphosate.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: DO NOT store below 10°F.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

[NONREFILLABLE CONTAINERS:]

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable ≤ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[REFILLABLE CONTAINERS:]

Refillable container. Refill this container with imazapyr only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Return to point of sale or offer for recycling if available, or by other procedures approved by state and local authorities.

IMPORTANT: Read the entire **DIRECTIONS FOR USE** and the **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY** before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. No such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

Microfoil is a trademark of Rhone Poulenc Ag. Company.

Thru-Valve is a trademark of Waldrum Specialties.

Accord is a registered trademark of Monsanto Company

Oust is a registered trademark of E.I. DuPont de Nemours and Company.

Garlon is a trademark of Dow AgroSciences Company.

Pendulum is a registered trademark of BASF.

Endurance and Vanquish are registered trademarks of Syngenta Group Company.

EPA 20170616



TRICLOPYR 3

Specimen Label

Herbicide for Control of Woody Plants, Aquatic Plants and Annual and Perennial Broadleaf Weeds in Forests; Industrial Non-crop areas including industrial manufacturing and storage sites; Rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, and railroads; Fence rows; Non-irrigation ditch banks; Non-crop areas around farm buildings; on Christmas tree plantations; Chemical mowing*; on Wetland sites in production forests and industrial non-crop areas; in Aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches which have little or no continuous outflow.

*Not approved for this use in California.

ACTIVE INGREDIENT:

Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine salt* 44.4%

OTHER INGREDIENTS: 55.6%

TOTAL: 100.0%

*Contains 3 pounds of Triclopyr acid equivalent per gallon (31.05%)

EPA Reg. No. 81927-13

KEEP OUT OF REACH OF CHILDREN

DAÑERO / PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
NOTE TO APPLICATOR: Allergic skin reaction is not expected from exposure to spray solutions of Alligare Triclopyr 3 herbicide when used as directed.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

Manufactured for:
Alligare, LLC
13 N. 8th Street
Opelika, AL 36801

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin or swallowed. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers who handle this pesticide must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Waterproof gloves

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are given, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the

requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

For aquatic uses, under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may contribute to fish suffocation. This loss can cause fish suffocation. Therefore, to minimize this hazard, do not treat more than one-third to one-half of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State agency for fish and game before applying to public water to determine if a permit is needed.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store the product near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses.

For applications to non-cropland areas, do not enter or allow others to enter the treated area until sprays have dried.

PRODUCT INFORMATION

Alligare Triclopyr 3 is used to control unwanted woody plants, aquatic plants, and annual and perennial broadleaf weeds:

- in Forests
- in Industrial Non-crop areas including industrial manufacturing and storage sites
- in Rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, and railroads
- in Fence rows
- in Non-irrigation ditch banks
- around Farm buildings
- on Christmas tree plantations
- for Chemical mowing (Not approved for this use in California)
- on Wetland sites in production forests and industrial non-crop areas
- in Aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches which have little or no continuous outflow

Alligare Triclopyr 3 use on these sites may include application to grazed areas as well as for the establishment and maintenance of wildlife openings.

TRICLOPYR 3

Specimen Label

USE PRECAUTIONS

- Obtain required permits: Consult with appropriate state or local water authorities before applying this product to public waters. State or local public agencies may require permits.
- It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites.
- When making application to banks or shorelines of moving water sites, minimize overspray to open water.

USE RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- Do not apply to ditches or canals used to transport irrigation water. It is permissible to treat non-irrigation ditch banks.
- Do not apply where runoff or irrigation water may flow onto agricultural land as injury to crops may result.
- Do not apply directly to un-impounded rivers or streams.
- Do not apply to salt water bays or estuaries.
- Do not apply using a mistblower.
- Do not make direct applications or allow spray mists to drift onto cotton; grapes; soybeans; tobacco; vegetable crops; flowers; ornamental shrubs or trees; or other desirable broadleaf plants.
- For rights-of-ways, fence rows, or any area where grazing and haying is allowed, do not apply more than 2 lb a.e. of triclopyr (2/3 gallon of Alligare Triclopyr 3) per acre per year.
- For forestry uses, do not apply more than 6 lb a.e. of triclopyr (2 gallons of Alligare Triclopyr 3) per acre per year.
- For all terrestrial uses other than forestry sites, and grazing/haying areas, a maximum of 9 lb a.e. of triclopyr (3 gallons of Alligare Triclopyr 3) per acre per year may be applied.
- All livestock, except lactating dairy animals, can graze at any time.
- Lactating dairy animals cannot graze forage until the next growing season after application.
- Do not harvest hay for 14 days after application.
- Grazed areas of non-cropland and forestry sites may be spot treated if they comprise no more than 10% of the total grazable area.
- Withdraw livestock from grazing treated grass or consumption of treated hay at least 3 days before slaughter.
- Arizona:** Alligare Triclopyr 3 has not been approved for use on plants grown for commercial production, specifically forests grown for commercial timber production, or on designated grazing areas.

APPLICATION DIRECTIONS

RATES

This table assists in determining proper volumes of Alligare Triclopyr 3 in the spray tank to avoid exceeding the maximum use rates using varying spray volumes.

Spray Volume Gallons/Acre	Maximum Application Rates		
	Maximum Rate of Alligare Triclopyr 3 Gallons per 100 gallons of spray volume		
	Grazed/Hayed Non-Cropland Sites ¹	Forestry Sites ²	Other Non- Cropland Sites ³
400	Do not use	0.5	0.75
300	Do not use	0.67	1
200	Do not use	1	1.5
100	0.67	2	3
50	1.33	4	6
40	1.67	5	7.5
30	2.33	6.65	10
20	3.33	10	15
10	6.67	20	30

¹For rights-of-ways, fence rows, or any area where grazing and haying is allowed, do not apply more than 2 lb a.e. of triclopyr (2/3 gallon of Alligare Triclopyr 3) per acre per year.

²For forestry uses, do not apply more than 6 lb a.e. of triclopyr (2 gallons of Alligare Triclopyr 3) per acre per year.

³For all terrestrial uses other than forestry sites, and grazed/hayed areas, a maximum of 9 lb a.e. of triclopyr (3 gallons of Alligare Triclopyr 3) per acre per year may be applied.

SPRAY ADDITIVES

All surfactants and drift control agents must be approved for food and feed use when used on food and feed sites.

Surfactants: When using surfactants, follow the use directions and precautions listed on the surfactant manufacturer's label. Use the higher recommended concentrations of surfactant in the spray mixture when applying lower sprayer volumes per acre.

Drift Control Agents: Agriculturally approved spray thickening drift control agents or high viscosity invert systems may be used with Alligare Triclopyr 3. When using these agents, follow all use directions and precautions on the product label. Do not use a thickening agent with the Microfoil boom, Thru-Valve boom, or other systems that cannot accommodate thick sprays.

TANK MIXES

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Tank Mixing Recommendations:

- Fill spray tank 1/2 full with water.

- Add spray thickening agent (if used).
- Add additional herbicide (if used).
- Add Alligare Triclopyr 3.
- Add surfactant (if used).
- Fill remainder of spray tank.

If combined with emulsifiable concentrate herbicides, moderate continuous adequate agitation is required.

SPRAY DRIFT MANAGEMENT

AVOID INJURIOUS DRIFT

Applications should only be made when there is little or no hazard from spray drift. Very small quantities of spray may seriously injure susceptible plants.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the following **AERIAL DRIFT REDUCTION ADVISORY**. [This information is advisory in nature and does not supersede mandatory label requirements.]

AERIAL DRIFT REDUCTION ADVISORY

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind: Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Applications should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent

TRICLOPYR 3

Specimen Label

cent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

APPLICATION EQUIPMENT AND TECHNIQUES

BROADCAST APPLICATIONS

Aerial Application: When making aerial applications on rights-of-way or other areas near susceptible crops, apply through a Microfoil¹ or Thru-Valve¹ boom, or use an agriculturally approved drift control agent. Other drift reducing systems or thickened sprays prepared by using high viscosity inverting systems may be used if they are made as drift-free as are mixtures containing agriculturally approved thickening agents or applications made with the Microfoil or Thru-Valve boom. Keep spray pressures low enough to provide coarse spray droplets. Spray boom should be no longer than 3/4 of the rotor length. Spray only when the wind velocity is low (follow state regulations). Avoid application during air inversions. If a spray thickening agent is used, follow all use directions and precautions on the product label.

'Note: Reference within this label to equipment produced by or available from other parties is provided without consideration for use by the reader at its discretion and subject to the reader's independent circumstances, evaluation, and expertise. Such reference by Alligare, LLC is not intended as an endorsement of such equipment, shall not constitute a warranty (express or implied) of such equipment, and is not intended to imply that other equipment is not available and equally suitable. Any discussion of methods of use of such equipment does not imply that the reader should use the equipment other than is advised in directions available from the equipment's manufacturer. The reader is responsible for exercising their own judgment and expertise, or consulting with sources other than Alligare, LLC, in selecting and determining how to use its equipment.

Ground Application: To aid in reducing spray drift, Alligare Triclopyr 3 should be applied in thickened (high viscosity) spray mixtures using an agriculturally approved drift control additive, high viscosity invert system, or equivalent as directed by the manufacturer. Use of low pressure nozzles; and operating nozzles in the lower end of the manufacturer's recommendations is advised. To minimize drift, keep the spray boom as low as possible, apply in ≥20 gallons of spray volume per acre, spray when wind velocities are low; or use an approved drift control agent.

In Hand Gun Applications, select the minimum spray pressure that will provide adequate plant coverage (without forming a mist). Do not apply with nozzles that produce a fine droplet spray.

High Volume Leaf-Stem Treatment: To minimize spray drift, do not use pressure exceeding 50 PSI at the spray nozzle and keep sprays no higher than brush tops. An agriculturally approved thickening agent may be used to reduce spray drift.

APPROVED USES

Refer to Tables 1 and 2 for lists of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

Apply Alligare Triclopyr 3 at rates of 0.25 to 3 gallons per acre for the control of broadleaf weeds and woody plants. Apply in enough water to provide uniform and complete coverage of the plants to be controlled. Use only water suitable for spraying. Use of an agriculturally approved nonionic surfactant is recommended for all foliar applications. For best results make applications when woody plants and weeds are actively growing.

Use higher rates within the range when brush averages 15 feet or more in height or when brush covers >60% of the area to be treated. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species. When easy to control brush species dominate, rates below those specified may be effective. Consult State or Local Extension personnel for information.

For hard-to-control species such as ash, black gum, choke cherry, elm, maples, oaks, pines, or winged elm; during late summer applications when plants are mature; or during drought conditions; use higher rates of Alligare Triclopyr 3 alone or use in combination with Tordon 101 Mixture. If lower rates are used on hard-to-control species, re-sprouting may occur in the year following treatment.

When applying Alligare Triclopyr 3 in a tank mix with 2, 4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester herbicides, use higher rates of Alligare Triclopyr 3 for satisfactory brush control.

When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

FOLIAGE APPLICATIONS WITH GROUND EQUIPMENT

High Volume Foliage Applications

For control of woody plants, apply Alligare Triclopyr 3 at 1 to 3 gallons per 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. Coverage should be thorough to wet all leaves, stems, and root collars.

Tank Mixing: 1 to 4 quarts of Alligare Triclopyr 3 may be tank mixed with 1 to 2 quarts of 2, 4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester or Tordon 101 Mixture diluted to make 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

Do not exceed maximum allowable use rates per acre. See Rate Table in the Rates Section of **APPLICATION DIRECTIONS**.

Low Volume Foliage Applications

For control of woody plants, mix up to 5 gallons of Alligare Triclopyr 3 in 10 to 100 gallons of spray solution. Adjust the spray concentration of Alligare Triclopyr 3 and total spray volume

per acre to match the size and density of target woody plants and kinds of spray equipment used. With low volume sprays, use sufficient spray volume to obtain uniform coverage of target plants including the surfaces of all foliage, stems, and root collars. For best results, a surfactant should be added to all spray mixtures. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Match equipment and delivery rate of spray nozzles to height and density of woody plants. When treating tall, dense brush, a truck mounted spray gun with spray tips that deliver up to 2 gallons per minute at 40 to 60 PSI may be required. Backpack or other types of specialized spray equipment with spray tips that deliver less than 1 gallon of spray per minute may be appropriate for short, low to moderate density brush.

Tank Mixing: Up to 3 gallons of Alligare Triclopyr 3 may be applied in tank mix combinations with 2 to 4 quarts of Tordon K or 1 to 2 gallons of Tordon 101 Mixture as a low volume foliar spray. These applications should be made in 10 to 100 gallons of spray solution. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

BROADCAST APPLICATION WITH GROUND EQUIPMENT

Use equipment that will assure thorough and uniform coverage at spray volumes applied. To improve spray coverage, add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**. See **Maximum Application Rates Table** in the **APPLICATION DIRECTIONS** for relationship between mixing rate, spray volume, and maximum application rate.

Woody Plant Control

Foliage Treatment: Apply 2 to 3 gallons of Alligare Triclopyr 3 in 20 to 100 gallons of spray solution per acre.

Tank Mixing: Alligare Triclopyr 3 at 2 to 4 quarts per acre may be tank mixed with 1 to 2 gallons of 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile esters or Tordon 101 Mixture in 20 to 100 gallons of spray solution per acre. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

Broadleaf Weed Control

Apply 1.3 to 6 quarts of Alligare Triclopyr 3 in 20 to 100 gallons of spray solution per acre. Apply any time during the growing season.

Tank Mixing: Alligare Triclopyr 3 at 1.3 to 4 quarts per acre may be tank mixed with 2 to 4 quarts of Tordon K; Tordon 101 Mixture, or 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester to improve the spectrum of activity. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

AERIAL APPLICATION (HELICOPTER ONLY)

Aerial sprays should be applied using suitable drift control. See the **SPRAY DRIFT MANAGEMENT** section for drift control advice. Add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** and the **APPLICATION EQUIPMENT AND TECHNIQUES** section. See **Maximum Application Rates Table** in the **APPLICATION DIRECTIONS** for relationship between mixing rate, spray volume, and maximum application rate.

FOLIAGE TREATMENT (RIGHTS-OF-WAY)

Apply 2/3 gallon of Alligare Triclopyr 3 per acre alone or tank mix with 1 to 2 gallons of 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile esters; or Tordon 101 Mixture. Apply in total spray volume of 1 to 30 gallons per acre.

When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

FOREST MANAGEMENT APPLICATIONS

For broadcast applications, apply the specified rate of Alligare Triclopyr 3 in 1 to 25 gallons per acre by air or in 10 to 100 gallons per acre by ground. Use sufficient spray volumes to provide thorough plant coverage. To improve spray coverage at volumes less than 50 gallons per acre, add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**. Use application systems designed to prevent spray drift to off-target sites. Nozzles or additives used for drift minimization that produce larger droplets may require higher spray volumes to provide brush control. See **APPLICATION EQUIPMENT AND TECHNIQUES** section.

Forest Site Preparation (Not For Conifer Release)

To control susceptible woody plants and broadleaf weeds, apply up to 2 gallons per acre of Alligare Triclopyr 3 in a total spray solution of 1 to 30 gallons per acre. Alligare Triclopyr 3 may be applied at a rate of 1 to 1.5 gallons per acre in a tank mix combination with 1 to 2 gallons of Tordon 101 Mixture or 2,4-D 3.8 lb low volatile ester to broaden the spectrum of woody plants and broadleaf weeds controlled. Use of a nonionic agricultural surfactant is recommended for all foliar applications. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

Conifer Plant Back Interval: Conifer injury may occur if conifers are planted sooner than 1 month after Alligare Triclopyr 3 treatments at rates <1-1/3 gallon per acre; or if conifers are planted sooner than 2 months after treatment with rates of 1-1/3 to 3 gallons per acre. When herbicide tank mixtures are used for forest site preparation, use the longest plant back waiting period listed on any tank mix partner.

Directed Spray Applications for Conifer Release

To release conifers from competing hardwoods such as red maple, sugar maple, striped maple, sweetgum, red and white oaks, ash, hickory, alder, birch, aspen, and pin cherry, mix 1 to 2 gallons of Alligare Triclopyr 3 in enough water to make 100 gallons of spray mixture.

TRICLOPYR 3

Specimen Label

To improve spray coverage, add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Direct the spray onto foliage of competitive hardwoods using knapsack or backpack sprayers with flat fan nozzles or equivalent. Make applications any time after the hardwoods have reached full leaf size, but before autumn coloration. The majority of treated hardwoods should be less than 6 feet in height to ensure adequate spray coverage. Care should be taken to direct the spray solution away from conifer foliage, particularly foliage of desirable pines.

Conifer Release Applications: Spray may cause temporary damage and growth suppression of conifers where direct contact occurs; however, injured conifers should recover and grow normally. **Over-the-top spray applications can kill pines.**

Broadcast Application for Conifer Release in the Northeastern United States
To release spruce, fir, red pine, and white pine from competing hardwoods such as red maple, sugar maple, striped maple, alder, birch (white, yellow, and grey), aspen, ash, pin cherry, and *Rubus* spp. and perennial and annual broadleaf weeds, apply Alligare Triclopyr 3 at 2 to 4 quarts per acre alone or in a tank mix with 2,4-D amine, like DMA 4 IVM, or 2,4-D low volatile ester. Apply no more than 4 pounds acid equivalent per acre from the combined products. Make applications in late summer or early fall after conifers have formed their over-wintering buds; and hardwoods are in full leaf prior to autumn coloration.

Broadcast Applications for Douglas Fir Release in the Pacific Northwest and California
To release Douglas fir from competing vegetation such as broadleaf weeds, alder, blackberry or Scotch broom, apply Alligare Triclopyr 3 at 1-1/3 to 2 quarts per acre alone or in combination with 4 lb per acre of atrazine. Add a nonionic surfactant to the spray solution. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**. Applications should be made in early spring after hardwoods begin growth **and before** Douglas fir bud break ("early foliar" hardwood stage). Applications can also be made in late summer, after Douglas fir seasonal growth has "hardened off" (winter bud set). Make applications while hardwoods are still actively growing. When treating after Douglas fir winter bud set, apply prior to onset of hardwood autumn coloration.

Note: Treatments applied during active Douglas fir shoot growth (after spring bud break and prior to winter bud set), may cause injury to Douglas fir trees.

Cut Surface Treatments
To control hardwood unwanted species such as elm, maple, oak; and conifers in rights-of-way and other noncrop areas, apply Alligare Triclopyr 3, either undiluted or diluted in a 1:1 ratio with water by one of the following methods:

Tree Injector Method: Inject 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution through the bark at intervals of 3-4 inches between injection wounds. The tree injections should completely surround the tree at any convenient height.

Note: Worker Protection Standard **AGRICULTURAL USE REQUIREMENTS** reentry restrictions do not apply for this application method. Refer to the **NON-AGRICULTURAL USE REQUIREMENTS** box.

Hack and Squirt Method: Use a hatchet or similar equipment to make cuts in the bark at intervals of 3-4 inches at a convenient height around the circumference of the tree trunk. Spray 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution into each cut.

Frill or Girdle Method: Make a single girdle through the bark completely around the tree at a convenient height. Wet the cut surface with undiluted Alligare Triclopyr 3 or the diluted (1:1) solution.

Both the **Hack and Squirt Method** and the **Frill or Girdle Method** may be successfully used during any season except during periods of heavy sap flow of certain species such as maples.

Stump Treatment: Spray or paint undiluted Alligare Triclopyr 3 on to the freshly cut surfaces of cut stumps and stubs. The cambium area next to the bark is the most vital area to wet.

Table 1 Woody Plants Controlled by Alligare Triclopyr 3			
Alder	Chinquapin	Maleleuca (seedlings)	Sweetbay Magnolia
Arrowwood	Choke Cherry	Maples	Sweet Gum
Ash	Cottonwood	Mulberry	Sycamore
Aspen	<i>Crataegus</i> (hawthorn)	Oaks	Tan Oak
Bear Clover (Bearmat)	Dogwood	Persimmon	Thimbleberry
Beech	Douglas fir	Pine	Tulip Poplar
Birch	Elderberry	Poison Ivy	Wax Myrtle
Blackberry	Elm	Poison Oak	Western Hemlock
Black gum	Gallberry	Poplar	Wild Rose
Brazilian Pepper	Hazel	Salmonberry	Willow
Cascara	Hornbeam	Salt-bush (<i>Braccharis</i> spp.)	Winged elm
Ceanothus	Kudzu ¹	Salt cedar ²	
		Sassafras	
Cherry	Locust	Scotch Broom	
Chinese Tallow	Madrone	Sumac	

¹For complete control, retreatment may be necessary.
²Use cut surface treatments for best results.

Table 2 Annual and Perennial Broadleaf Weeds Controlled by Alligare Triclopyr 3			
Bindweed	Dandelion	Plantain	Tropical Soda apple
Burdock	Elephant Ear	Purple Loosestrife	Vetch
Canada Thistle	Field Bindweed	Ragweed	Wild Lettuce
Chicory	Lambsquarter	Smartweed	
Curly Dock	Ligodium	Tansey Ragwort	

WETLAND SITES IN PRODUCTION FORESTS AND INDUSTRIAL NON-CROP AREAS
Alligare Triclopyr 3 may be used in wetlands within forests; wildlife habitat restoration, wildlife management areas, and industrial non-crop sites; as well as areas adjacent to or surrounding domestic water supply reservoirs, lakes and ponds to control target vegetation in and around standing water sites, such as flood plains, delta, marshes, wetlands, swamps, bogs, and transitional areas between upland and lowland sites, and the banks of ponds and lakes and transition areas between upland and lowland sites.

For control of woody plants and broadleaf weeds in these sites, follow use directions and application methods on this label for **FOREST MANAGEMENT APPLICATIONS**. Refer to Tables 1 and 2 (above) for lists of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

- Use Restrictions and Precautions for Wetland Sites**
- Refer to the **USE PRECAUTIONS** and **USE RESTRICTIONS** section for additional restrictions and precautions.
 - **Minimize overspray to open water** when treating target vegetation in and around non-flowing, quiescent or transient water. When making applications to control unwanted plants on banks or shorelines of flowing water, minimize over spray to open water.
 - **Obtain Required Permits:** Before applying this product in and around public water, consult appropriate local public water control authorities. Permits may be required to treat such areas.
 - **Recreational Use of Water in the Treatment Area:** There are no restrictions on water use in the treatment area for recreational purposes, including swimming and fishing.
 - **Livestock Use of Water from Treatment Area:** There are no restrictions on consumption of water from treated areas by livestock.

Purple Loosestrife (*Lythrum salicaria*)
Purple loosestrife can be controlled with broadcast foliar applications of Alligare Triclopyr 3 at a minimum of 6 to 8 quarts per acre. Apply when purple loosestrife is at the bud to mid-flowering stage of growth. Follow-up applications for control of regrowth should be made the following year to achieve increased control of this weed species. For all applications, add a nonionic surfactant labeled for aquatics to the spray mixture.

Follow all directions and use precautions on the surfactant label.

Thorough wetting of the foliage and stems is necessary to achieve satisfactory control. A minimum spray volume of 50 gallons per acre is recommended for ground broadcast applications.

For backpack applications, a spray solution of 1 to 1.5% Alligare Triclopyr 3 (5 to 7.6 fl oz of Alligare Triclopyr 3 per 4 gallons of water) should be used. All purple loosestrife plants should be thoroughly wetted.

Aerial application by helicopter may be needed when treating restoration sites that are inaccessible, remote, difficult to traverse, isolated, or otherwise unsuited to ground application, or in circumstances where invasive exotic weeds dominate native plants populations over extensive areas and efforts to restore native plant diversity are being conducted. By air, apply in a minimum spray volume of 30 gallons per acre using Thru-Valve or Microfoil boom only.

Terrestrial Sites Associated with Wetland Areas
Refer to Tables 1 and 2 (above) for a list of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

Apply Alligare Triclopyr 3 at rates of 0.25 to 2 gallons per acre for the control of broadleaf weeds and woody plants. Apply in enough water to provide uniform and complete coverage of the plants to be controlled. Use only water suitable for spraying. Use of an agriculturally approved nonionic surfactant is recommended for all foliar applications. Refer to **SPRAY ADDITIVES** in the **APPLICATION DIRECTIONS** section. Refer to **TANK MIXES** in the **APPLICATION DIRECTIONS** section for the order of addition of surfactants. For best results make applications when woody plants and weeds are actively growing.

Use higher rates within the range when brush averages 15 feet or more in height or when brush covers >60% of the area to be treated. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species.

For hard-to-control species such as ash, black gum, choke cherry, maples, or oaks; during late summer applications when plants are mature; or during drought conditions; use higher rates of Alligare Triclopyr 3 alone or use in combination with a 2,4-D approved for aquatic use, such as DMA 4 IVM, generally the higher rates should be used for satisfactory brush control. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

High Volume Foliage Applications
For control of woody plants, apply Alligare Triclopyr 3 at 1 to 2 gallons per 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. Coverage should be thorough to wet all leaves, stems, and root collars.

Tank Mixing: 1 to 4 quarts of Alligare Triclopyr 3 may be tank mixed with 1 to 2 quarts of 2, 4-D 3.8 lb amine, like DMA 4 IVM, diluted to make 100 gallons of spray solution. Make appli-

TRICLOPYR 3

cations in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, application rates, approved uses, and a list of weeds and woody plants controlled.

Low Volume Foliage Applications

For control of woody plants, mix up to 5 gallons of Alligare Triclopyr 3 in 10 to 100 gallons of spray solution. Adjust the spray concentration of Alligare Triclopyr 3 and total spray volume per acre to match the size and density of target woody plants and kinds of spray equipment used. With low volume sprays, use sufficient spray volume to obtain uniform coverage of target plants including the surfaces of all foliage, stems, and root collars. For best results, a labeled aquatic surfactant should be added to all spray mixtures.

Match equipment and delivery rate of spray nozzles to height and density of woody plants. When treating tall, dense brush, a truck mounted spray gun with spray tips that deliver up to 2 gallons per minute at 40 to 60 PSI may be required. Backpack or other types of specialized spray equipment with spray tips that deliver less than 1 gallon of spray per minute may be appropriate for short, low to moderate density brush.

Cut Surface Treatments (Woody Plants)

To control unwanted trees and other listed woody plants in Table 1 (above), apply Alligare Triclopyr 3, either undiluted or diluted in a 1:1 ratio with water by one of the following methods:

Tree Injector Method: Inject 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution through the bark at intervals of 3-4 inches between injection wounds. The tree injections should completely surround the tree at any convenient height.

Note: Worker Protection Standard **AGRICULTURAL USE REQUIREMENTS** reentry restrictions do not apply for this application method. Refer to the **NON-AGRICULTURAL USE REQUIREMENTS** box.

Hack and Squirt Method: Use a hatchet or similar equipment to make cuts in the bark at intervals of 3-4 inches at a convenient height around the circumference of the tree trunk. Spray 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution into each cut.

Frill or Girdle Method: Make a single girdle through the bark completely around the tree at a convenient height. Wet the cut surface with undiluted Alligare Triclopyr 3 or the diluted (1:1) solution.

Both the **Hack and Squirt Method** and the **Frill or Girdle Method** may be successfully used during any season except during periods of heavy sap flow of certain species such as maples.

Stump Treatment: Spray or paint undiluted Alligare Triclopyr 3 on to the freshly cut surfaces of cut stumps and stubs. The cambium area next to the bark is the most vital area to wet.

CHRISTMAS TREE PLANTATIONS

Alligare Triclopyr 3 is used to control unwanted woody plants and annual and perennial broadleaf weeds in established Christmas tree plantations. For best results, make applications when woody plants and weeds are actively growing. Alligare Triclopyr 3 only controls weeds which are emerged at the time of application.

Brush >8 feet tall is difficult to treat efficiently using hand equipment such as backpack or knapsack sprayers. Use higher rates of Alligare Triclopyr 3 or use cut surface application methods when treating large brush or trees; hard to control species such as ash, black gum, choke cherry, elm, hazel, madrone, maples, oaks or sweetgum; for applications made during drought conditions; or late summer applications when the leaves are mature. For foliar applications, apply in enough water to provide uniform and complete coverage of the plants to be controlled. Applications made under drought conditions may provide less than desirable results. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species.

Use Restrictions and Precautions for Christmas Tree Plantations

- Do not tank mix with 2,4-D for use in Christmas tree plantations.
- Only apply Alligare Triclopyr 3 to **established** Christmas trees that have been **planted at least one full year** prior to application.
- To prevent Christmas tree injury, take care to direct spray away from Christmas tree foliage to avoid contact.
- Do not use on newly seeded grass until well established as indicated by vigorous growth and development of secondary root system and tillering.
- Mow newly seeded turf (alleysways, etc.) two or three times before treatment with Alligare Triclopyr 3.
- Do not reseed Alligare Triclopyr 3 treated Christmas tree areas within three weeks after application.
- Do not use Alligare Triclopyr 3 if legumes, such as clover, are present and injury cannot be tolerated.

Spray Solution Preparation

Refer to the **TANK MIXES** section of **APPLICATION DIRECTIONS** for order of addition to the spray tank. Continue moderate agitation while mixing and spraying. Use of a nonionic agricultural surfactant is recommended for all applications. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS** for surfactant recommendations.

Application

Make applications in late summer or early autumn after terminal growth of Christmas trees has hardened off, but before leaf drop of target plants. Apply 2 to 5 pints per acre of Alligare Triclopyr 3 as a foliar spray directed toward the base of Christmas trees. Use sufficient spray volume (20 to 100 gallons per acre) to provide uniform coverage of target plants. Specified application rates of Alligare Triclopyr 3 (see Table 3, below) will only suppress some well established woody plants that are 2 to 3 years old. Broadcast sprays may also be applied in bands between the rows of planted trees. Select spray equipment that will provide uniform

Specimen Label

coverage at the desired spray volume.

Alligare Triclopyr 3 spray solution can cause Christmas tree needle and branch injury. To minimize Christmas tree injury, direct sprays to minimize Christmas tree foliage contact. White pine and Douglas fir are more susceptible to injury than blue spruce, white spruce, balsam fir and Fraser fir. Refer to the **Use Restrictions and Precautions for Christmas Tree Plantations**.

Directed Applications

For control of hardwoods such as red maple, sugar maple, striped maple, sweetgum, red and white oaks, ash, alder, birch, aspen, and pin cherry; mix 4 to 20 fluid ounces of Alligare Triclopyr 3 in enough water to make 3 gallons of spray solution. For directed applications, do not exceed 2 gallons of Alligare Triclopyr 3 per acre per year. To improve coverage, add a nonionic agricultural surfactant to the spray. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS** for surfactant recommendations. Direct this spray mixture onto foliage of competitive hardwoods using knapsack or backpack sprayers with flat fan (or equivalent) nozzles any time after hardwoods have reached full leaf size, but before autumn coloration (when plants are actively growing). The majority of treated hardwoods should be <8 feet in height to ensure adequate spray coverage.

Cut Surface Treatments

Use cut surface treatments when treating large brush and trees; hard to control species such as ash, blackgum, choke cherry, elm, hazel, madrone, maples, oaks, salt cedar or sweetgum; for applications during drought conditions; or for late summer applications when the leaves are mature. Refer to the Cut Surface Treatments in the Forest Management section for use directions.

Table 3
Christmas Tree Plantation
Application Rates and Species Controlled

Alligare Triclopyr 3		
2 pints per acre	3 to 4 pints per acre	5 pints per acre
Clover	Bindweed, Field ¹	Arrowwood ⁴
Dandelion	Blackberry ²	Aspen
Dock, Curly	Chicory ³	Beech ⁴
Lambsquarter	Fireweed	Birch ⁴
Lespedeza	Ivy, Ground	Chinquapin
Plantain, Broadleaf	Lettuce, Wild	Cottonwood ⁴
Plantain, Buckhorn	Oxalis	Elderberry
Ragweed, Common	Poison Ivy	Grape, Wild
Vetch	Smartweed ¹	Mulberry ⁴
	Thistle, Canada ¹	Poplar ²
	Violet, Wild	Sassafras ⁴
	Virginia Creeper ²	Sumac ⁴
		Sycamore ⁴

¹Top growth control, retreatment may be necessary

²Use 4 pints per acre.

³Suppression

⁴Seedlings less than 2-3 years old

CHEMICAL MOWING ON NON-CROPLAND SITES INFESTED WITH ANNUAL AND PERENNIAL BROADLEAF WEEDS OR WOODY PLANTS*

*Not approved for this use in California

Apply Alligare Triclopyr 3 to the cut surfaces of weed or brush stubble under the deck of a rotary mower such as the Lucas "64" System or other approved equipment that is designed to uniformly apply the herbicide. Use this method of application for control of annual and perennial broadleaf weeds and for suppression and stem density reduction of woody plants that occur on rights-of-way, airport grounds, petroleum tank farms or other industrial sites. Apply when growing conditions are favorable and there is active plant growth.

Broadleaf Weed Control: Apply this product at labeled rates under the section Broadcast Application with Ground Equipment, Broadleaf Weed Control. Apply in a minimum spray volume of 3 gallons per acre. Follow label directions for herbicides that may be applied in tank mix combination with this product to improve weed control or broaden the spectrum of weeds controlled.

Woody Plant Control: For suppression and stem density reduction of woody species, use 3 to 6 gallons of Alligare Triclopyr 3 in a minimum spray volume of 5 gallons per acre. Follow label directions for herbicides that may be applied in tank mix combination with this product to improve woody plant control or broaden the spectrum of woody plants controlled.

AQUATIC SITES

Alligare Triclopyr 3 can be used to control emerged, submersed, and floating aquatic plants in aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches (with little or no continuous outflow), marshes, and wetlands. Alligare Triclopyr 3 can also be used to control broadleaf and woody vegetation on banks and shores within or adjacent to these and other aquatic sites.

Aquatic Weeds Controlled by Alligare Triclopyr 3

Alligatorweed	Milfoil species	Purple loosestrife
American lotus	Nuphar (spatterdock)	Waterhyacinth
American frogbit	Parrotfeather ¹	Waterlily
Aquatic soda apple	Pickersweed	Waterprimrose
Eurasian watermilfoil	Pennywort	

¹Retreatment may be needed to achieve desired level of control.

TRICLOPYR 3

Specimen Label

Use Restrictions and Precautions for Aquatic Sites

- Refer to the **USE PRECAUTIONS** and **USE RESTRICTIONS** section of this label for additional precautions and restrictions.
- Obtain Required Permits:** Before applying this product to public waters, consult with appropriate state or local water authorities. State or local public agencies may require permits.
- Do not use treated water for irrigation for 120 days following application. As an alternative to waiting 120 days, treated water may be used for irrigation once the level of triclopyr in the intake water is determined to be non-detectable by laboratory analysis (immunoassay). There is no restriction on use of water from the treatment area to irrigate established grasses.
- Recreational Use of Water in the Treatment Area:** There are no restrictions on water use in the treatment area for recreational purposes, including swimming and fishing.
- Livestock Use of Water from Treatment Area:** There are no restrictions on consumption of water from treated areas by livestock.

Floating and Emerged Aquatic Weeds

Surface Application: Use a spray boom, handgun or other similar suitable equipment mounted on a boat or vehicle. Thorough wetting of foliage is essential for maximum effectiveness. Use 20 to 200 gallons per acre of spray mixture. Special precautions such as the use of low spray pressure, large droplet producing nozzles or addition of a labeled thickening agent may minimize spray drift in areas near sensitive crops.

Aerial Application (Helicopter only): Apply using a Microfoil, Thru-Valve boom, or a drift control additive in the spray solution. Apply in a minimum of 1 gallon of total spray solution per acre. Do not apply when weather conditions favor drift to sensitive areas. See the **SPRAY DRIFT MANAGEMENT** section for drift control advice.

Apply 0.5 to 2 gallons of Alligare Triclopyr 3 per acre as a foliar application for control of waterhyacinth, alligatorweed (see specific directions below), and other susceptible emerged and floating herbaceous weeds and woody plants. Make applications using surface or aerial equipment. User higher rates in the rate range when plants are mature, when the weed mass is dense, or for difficult to control species. Repeat treatments may be necessary to control regrowth and weeds which escaped spray, but do not apply more than 2 gallons of Alligare Triclopyr 3 per acre per annual growing season. Make applications when plants are actively growing.

Use of a nonionic surfactant in the spray solution is recommended to improve control. Follow all directions and use precautions on the aquatic surfactant label.

Floating and Emerged Weed Control – Alligare Triclopyr 3 Rates

Weed Species	Scientific Name	Gallons Per Acre	Application Timing and Remarks
Waterhyacinth	<i>Eichhornia crassipes</i>	0.5 – 2	Apply when plants are actively growing. Use the higher rate when the weed mass is dense. Thoroughly wet all foliage. Repeat treatments may be needed to control regrowth or escaped plants.
Alligatorweed	<i>Alternanthera philoxeroides</i>	0.75 – 2	Thoroughly wet all foliage. Weeds growing outside the margins of a body of water can be controlled. Alligatorweed growing in water will be only partially controlled. Top growth above water will be controlled, but plants will likely regrow from underwater tissue. Use a nonionic aquatic surfactant for best results.

Potable Water Intake Setbacks for Control of Floating and Emerged Weeds – Lakes, Reservoirs, or Ponds

Minimum setback distances from functioning potable water intakes for human consumption for the application of Alligare Triclopyr 3 must be observed when controlling floating and emerged weeds in lakes, reservoirs or ponds. These setback restrictions do not apply to terrestrial applications made adjacent to potable water intakes. Existing potable water intakes which are no longer in use are not considered to be functioning and these setback restrictions do not apply. Examples of this would be potable water intakes replaced by potable water wells or connections to a municipal water system.

The following table provides the minimum setback distances based on the Alligare Triclopyr 3 rate and the area treated for floating and emerged weed control.

Potable Water Intake Setback Distances for Application of Alligare Triclopyr 3 for Control of Floating and Emerged Weeds in Lakes, Reservoirs, or Ponds

Minimum Setback Distances (feet)				
Area Treated (acres)	TRICLOPYR 3 Rate (quarts/acre)			
	2	4	6	8
<4	0	200	400	500
>4 – 8	0	200	700	900
>8 – 16	0	200	700	1000
>16	0	200	900	1300

Alligare Triclopyr 3 can be applied around functioning potable water intakes or closer than these setback distances as long as the intake is turned off until the level of triclopyr in the intake water is determined to be less than or equal to 0.4 parts per million (ppm) as determined by laboratory analysis or immunoassay.

Submerged Weeds – Control of Eurasian Watermilfoil and other Susceptible Species
Subsurface Application: Alligare Triclopyr 3 can be applied directly into the water through

boat-mounted distribution systems. Subsurface application may be desirable near areas of susceptible crops or other desirable broadleaf plants to avoid spray drift. Refer to the Rate Table below to determine the desired amount.

Surface Application: Alligare Triclopyr 3 can be applied either as a concentrate or as a spray solution diluted in water. Use a minimum spray volume of 5 gallons per acre. Do not apply when weather conditions favor drift to sensitive areas. See the **SPRAY DRIFT MANAGEMENT** section for drift control advice.

Apply 0.75 to 2.5 ppm acid equivalent (a.e.) of Alligare Triclopyr 3 for control of Eurasian watermilfoil (*Myriophyllum spicatum*) and other susceptible submerged weeds in ponds, lakes, reservoirs, and in non-irrigation canals or ditches that have little or no continuous outflow. Make applications using surface or subsurface application. Use higher rates within the rate range in areas of greater water exchange. Repeat treatments may be necessary, but do not apply more than 2.5 ppm acid equivalent of Alligare Triclopyr 3 per acre per annual growing season. Refer to following table to determine the desired amount.

Make applications in spring or early summer when Eurasian watermilfoil or other submerged weeds are actively growing.

Alligare Triclopyr 3 Rates for Control of Submerged Weeds in Ponds, Lakes, Reservoirs, and in Non-irrigation Canals or Ditches

Concentration of Triclopyr Acid Equivalent in Water (ppm a.e.)					
	Alligare Triclopyr 3 gallons per surface area at specified depth				
Water Depth (feet)	0.75 ppm	1 ppm	1.5 ppm	2 ppm	2.5 ppm
1	0.7	0.9	1.4	1.8	2.3
2	1.4	1.8	3.3	3.6	4.6
3	2.1	2.9	4.1	5.4	6.8
4	2.7	3.6	5.4	7.2	9.1
5	3.4	4.5	6.8	9.0	11.3
6	4.1	5.4	8.1	10.9	13.6
7	4.8	6.3	9.5	12.7	15.8
8	5.5	7.2	10.9	14.5	18.1
9	6.1	8.1	12.2	16.3	20.4
10	6.8	9.0	13.6	18.1	22.6
15	10.2	13.6	20.4	27.2	33.9
20	13.6	18.1	27.2	36.2	45.3

Potable Water Intake Setbacks for Control of Submerged Weeds – Lakes, Reservoirs, or Ponds

Minimum setback distances from functioning potable water intakes for human consumption for the application of Alligare Triclopyr 3 must be observed when controlling submerged weeds in lakes, reservoirs or ponds. These setback restrictions do not apply to terrestrial applications made adjacent to potable water intakes. Existing potable water intakes which are no longer in use are not considered to be functioning and these setback restrictions do not apply. Examples of this would be potable water intakes replaced by potable water wells or connections to a municipal water system.

The following table provides the minimum setback distances based on the Alligare Triclopyr 3 rate and the area treated for submerged weed control.

Potable Water Intake Setback Distances for Application of Alligare Triclopyr 3 for Control of Submerged Weeds in Lakes, Reservoirs, or Ponds

Minimum Setback Distances (feet)					
Area Treated (acres)	Concentration of Triclopyr Acid Equivalent in Water (ppm a.e.)				
	0.75 ppm	1 ppm	1.5 ppm	2 ppm	2.5 ppm
<4	300	400	600	800	1000
>4 – 8	420	560	840	1120	1400
>8 – 16	600	800	1200	1600	2000
>16 – 32	780	1040	1560	2080	2600
>32 acres, calculate the minimum setback distance using formula given for chosen application rate	Setback (ft) = [800 X ln (acres) – 160]/3.33	Setback (ft) = [800 X ln (acres) – 160]/2.5	Setback (ft) = [800 X ln (acres) – 160]/1.67	Setback (ft) = [800 X ln (acres) – 160]/1.25	Setback (ft) = [800 X ln (acres) – 160]

Example Calculations:

To apply Alligare Triclopyr 3 at 2.5 PPM a.e. to 50 acres:

$$\begin{aligned}\text{Setback in feet} &= [800 \times \ln (50 \text{ acres})] - 160 \\ &= [800 \times 3.912] - 160 \\ &= 2970 \text{ feet}\end{aligned}$$

To apply Alligare Triclopyr 3 at 0.75 PPM a.e. to 50 acres:

$$\begin{aligned}\text{Setback in feet} &= \frac{[800 \times \ln (50 \text{ acres})] - 160}{3.33} \\ &= \frac{[800 \times 3.912] - 160}{3.33} \\ &= 892 \text{ feet}\end{aligned}$$

Alligare Triclopyr 3 can be applied around functioning potable water intakes or closer than these setback distances as long as the intake is turned off until the level of Triclopyr in the intake water is determined to be less than or equal to 0.4 parts per million (ppm) as determined by laboratory analysis or immunoassay.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store above 28°F or agitate before use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

[NONREFILLABLE CONTAINERS]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable container ≤ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. (Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

[REFILLABLE CONTAINERS]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY

Upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. The Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. No such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

EPA 20150507

EZ-JECT™ Copperhead Herbicide Shells

Specimen Label

ArborSystems™ Direct-Inject™ Chemical

Water-Soluble Herbicide in Shells for Trunk and Stem Injection
Controls Undesirable Woody Brush, Trees and Vines – Roots and All

ACTIVE INGREDIENT:

Imazapyr 83.5%

OTHER INGREDIENTS 16.5%

Total: 100.0%

Net Contents	Shell Net Weight	Total Net Weight
1200 Shells	0.03 ounce (0.95 g)	2.25 lbs. (1kg)

EPA Reg. No. 83220-2 EPA Est. 69117-NE-1

Keep Out of Reach of Children

CAUTION

See below for additional Precautionary Statements.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin or clothing.

FIRST AID

If in Eyes: Immediately flush with plenty of water. Get medical attention if irritation persists. Remove product from skin or clothing.

If Swallowed: Immediately induce vomiting as directed by medical personnel.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside, then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is recommended for woody brush, tree and vine control in all non-cropland sites including forestry, roadsides, rights-of-way, industrial, residential, fencerows, railroads and aquatic sites. Woody vegetation may be controlled by injection of EZ-Ject Copperhead Herbicide Shells.

This product moves throughout the tree from the point of injection to all roots and shoots. Symptoms appear gradually (normally within 2 to 4 weeks) beginning with wilting, yellowing and browning of the foliage. This is followed by deterioration of all roots and shoots.

For aquatic sites, this product may be injected into stems of trees and brush standing in water or wetlands. Do not apply directly to water or inject into stems below the water level.

Inject the shells using only the EZ-Ject shell injection equipment. The shells must penetrate through the outer bark into living phloem tissue to provide effective results. For trees with less than 2.5 inch DBH (diameter at breast height), inject one shell per stem. Inject one shell every 4 inches, evenly around the trunk of the tree, below all major branches. Tree may be injected at any time of the year except when wood is frozen.

This product will control the following species:

- American beech (*Fagus grandifolia*)
- Ash (*Fraxinus* spp.)
- Aspen (*Populus* spp.)
- Bald cypress (*Taxodium distichum*)
- Bignonia maple (*Acer macrophyllum*)
- Blackgum (*Nyssa sylvatica*)
- Boxelder (*Acer negundo*)
- Cherry (*Prunus* spp.)
- Chinaberry (*Melia azedarach*)
- Chinese tallow-tree (*Sapium sebiferum*)
- Dogwood (*Cornus* spp.)
- Hawthorn (*Crataegus* spp.)
- Hickory (*Carya* spp.)
- Maple (*Acer* spp.)
- Mulberry (*Morus* spp.)
- Oak (*Quercus* spp.)
- Persimmon (*Diospyros virginiana*)
- Poplar (*Populus* spp.)
- Privet (*Ligustrum vulgare*)
- Red alder (*Alnus rubra*)
- Red maple (*Acer rubrum*)
- Sassafras (*Sassafras albidum*)
- Sourwood (*Oxydendrum arboreum*)
- Sumac (*Rhus* spp.)
- Sweetgum (*Liquidambar styraciflua*)
- Willow (*Salix* spp.)
- Yellow poplar (*Linodendron tulipifera*)

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide Storage: Keep container closed to prevent spills and contamination. At the end of each use period, remove unused shells from EZ-Ject shell injection system. Replace unused shells in original container and re-seal.

Pesticide Disposal: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state and local procedures.

Container Disposal: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

For additional product information, call 1-888-395-6732

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein. Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

The exclusive remedy of the user or buyer, and the limit of the liability of this company or any other seller for any and all losses, injuries or damages resulting from the use or handling of this product (including claims based in contract, negligence, strict liability, other tort or otherwise) shall be the purchase price paid by the user or buyer for the quantity of this product involved, or at the election of the company or any other seller, the replacement of such quantity, or if not acquired by purchase, replacement of such quantity. In no event shall this company or any other seller be liable for any incidental, consequential or special damages.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

EZ-Ject™ is a trademark of EZ-Ject, Inc.

Sold by

EZ-Ject, Inc.

P.O. Box 34645 • Omaha, NE 68134
Toll Free: 1-888-395-6732



CITY OF
BAINBRIDGE ISLAND

City Council Study Session Agenda Bill

MEETING DATE: March 19, 2024

ESTIMATED TIME: 20 Minutes

AGENDA ITEM: (7:40 PM) Discuss Contents and Policy Implications of Two Documents Pertaining to the Updates of the Winslow Subarea Plan and the Comprehensive Plan,

SUMMARY: Pursuant to discussion during the February 27, 2024 business meeting of the ongoing work by City staff and consultants on Winslow Subarea Plan and the Comprehensive Plan, members of the Council have been encouraged to study two documents that are now present on the City of Bainbridge Island website: a 14-page "Orientation Interview Summary" prepared by consultants involved in the Comprehensive Plan update, and a 9-page DRAFT of the "Alternatives" chapter in Winslow 2044, the update of the Subarea Plan.

At the March 12, 2024, City Council business meeting, Council agreed to place a discussion of these two documents on the agenda.

AGENDA CATEGORY: Discussion

PROPOSED BY: City Council

RECOMMENDED MOTION: Discussion only.

COMMUNITY ENGAGEMENT AND OUTREACH:

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Draft Summary of Alternatives.pdf](#)

[Orientation Interview Summary.pdf](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

WINSLOW 2044

ALTERNATIVES



ACKNOWLEDGMENTS AND TABLE OF CONTENTS

The Winslow Subarea Plan Update team could like to thank all of the community members who attended meetings and provided comments as well as the following agencies, groups, and individuals:

CITY OF BAINBRIDGE ISLAND CITY COUNCIL

At the time of Council adoption of this plan:

- Brenda Fantroy-Johnson, Mayor
- Jon Quitslund, Deputy Mayor*
- Joe Deets
- Kirsten Hytopoulos*
- Clarence Moriwaki
- Ashley Matthews*
- Leslie Schneider*

CITY OF BAINBRIDGE ISLAND PLANNING COMMISSION

- Sarah Blossom, Vice Chair*
- Ashley Matthews, Council Liaison*
- Ariel Birtley
- Yesh Subramanian
- Peter Schaab
- Sean Sullivan*
- Benjamin Deines

* MEMBERS OF THE BI COMPREHENSIVE PLAN AND WINSLOW SUBAREA PLAN UPDATE STEERING COMMITTEE.

CITY OF BAINBRIDGE ISLAND TEAM

- Blair King - City Manager
- Patricia Charnas - Planning Director
- HB Harper - Planning Manager
- Jennifer Sutton - Senior Planner
- Paul Nylund - Engineering Manager
- Chris Wierzbicki - Public Works Director
- Peter Best - Senior Planner
- Shannon Hays - Communications Coordinator

CONSULTANT TEAM

- LMN Architects - Planning, Urban Design
- Toole Design Group - Transportation
- Strategic Economics - Economics
- EA Engineering, Science, and Technology, Inc. - EIS

CONTRIBUTING AGENCIES AND ORGANIZATIONS

TRANSIT

- WSDOT
- Kitsap Transit
- Bainbridge Greenways
- Squeaky Wheels

CITY ADVISORY GROUP

- Race Equity Advisory Committee
- Planning Commission
- Design Review Board

OTHER AGENCIES

- Fire Department
- Police Department
- School District
- Parks and Recreation District

COMMUNITY ORGANIZATIONS

- Arts and Humanities Bainbridge
- Kids Discovery Museum
- Bainbridge Dance Center
- Sustainable Bainbridge
- Bainbridge Conservation Coalition
- Bainbridge Senior Center
- Bainbridge Island Chamber of Commerce
- Bainbridge Island Interfaith Council
- Madrona School
- Rotary Club of Bainbridge Island
- St. Cecilia Catholic School
- Bainbridge Island Parks and Trails Foundation
- Island Volunteer Caregivers
- Bainbridge Community Foundation
- Island Health and Rehabilitation
- BI Parks and Trails Foundation
- Bainbridge Performing Arts
- Bainbridge Island Historical Museum
- Bainbridge Island Museum of Art
- Bainbridge Library
- Bainbridge Artisan Resource Network (BARN)

BAINBRIDGE ISLAND COMMUNITY

More than 1,700 people have participated through the public engagement process, most of whom live on the Island and are residents of the Winslow Subarea.

This DRAFT Alternatives section will be a chapter in the Subarea Plan report, to be released upon project completion. Sections will be made available on the project website as the process proceeds.

A. INTRODUCTION

B. EXECUTIVE SUMMARY

C. EXISTING CONDITIONS

D. OUTREACH AND ENGAGEMENT

E. SYNTHESIS AND VISION

THIS DOCUMENT —→ F. ALTERNATIVES

G. PREFERRED ALTERNATIVE

H. CODE AND POLICY RECOMMENDATIONS

I. NEXT STEPS

J. APPENDIX

ALTERNATIVES EXECUTIVE SUMMARY

The alternatives phase of the project followed the project team’s evaluation of existing conditions, more than 20 workshops and public meetings with over 1,700 community members, 3 updates to the Council, and close coordination with the City’s Steering Committee. Also informing these alternatives are the earlier visioning work, community lenses (see Exhibit F-1), City, County, and State Planning imperatives. See chapters C, D, and E for more information. In all of these engagements, housing affordability and advancing the City’s 2022 Housing Action Plan consistently rose to a top priority.

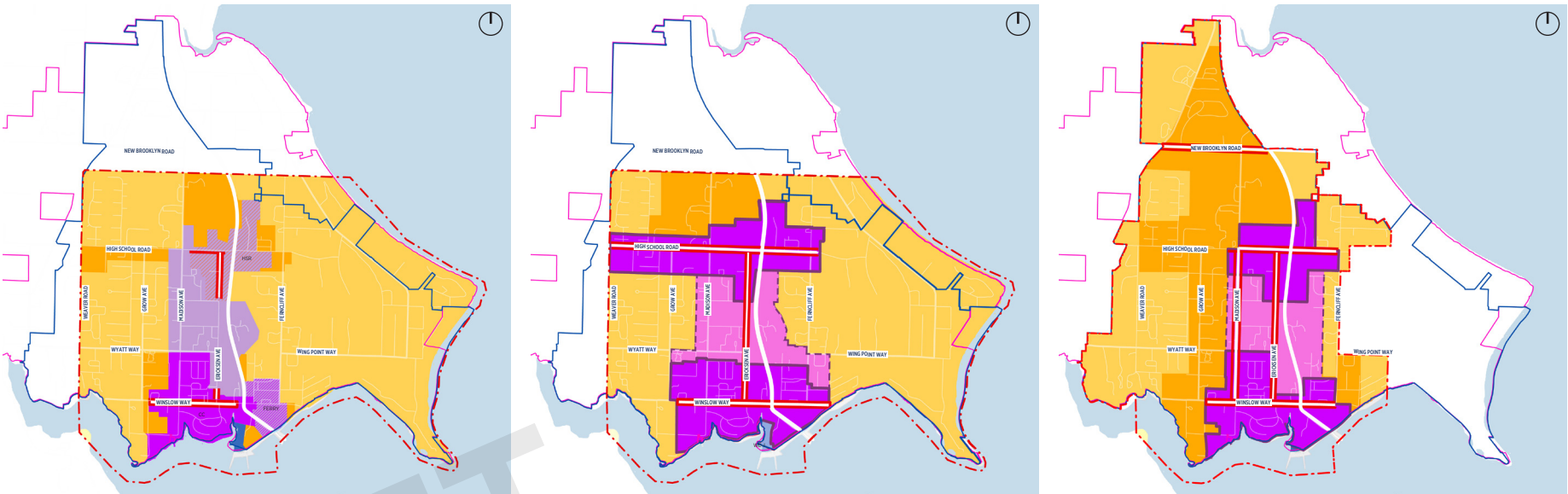


EXHIBIT F-1 COMMUNITY LENSES

The purpose of the alternatives phase was to organize the public’s ideas and planning mandates in order to test ideas and gather feedback to inform a preferred alternative. None of the alternatives presented were intended to become the preferred alternative, rather the alternatives test logical extremes based on the project inputs to inform the preferred alternative. Feedback on the three alternatives from the public and elected officials can be found in the Outreach and Engagement section, see Chapter D - Outreach and Engagement.

Three alternatives were developed through this process that considered land use, open space, and mobility changes over the next 20 years. **Alternative 01** investigates what might happen were the City to take no additional land-use actions, though existing plans and policies could remain in place. The team found that under this scenario, it is unlikely for the City to meet their affordability or environmental goals, and some of the community’s concerns about the built character of the Island could remain unaddressed. More on this alternative can be found on pages 2-3.

Alternative 02 tested the idea that future growth in the Winslow Subarea might take place in the existing Winslow and Ferry Terminal centers and in an intensified mixed-use center along High School Road. This alternative was coined ‘Go UP’ as it considers the most density and height, in line with what was called for in the Housing Action Plan in order to promote more multifamily and affordable housing in centers. This alternative tested the most land use capacity of the three, and could meet the HB1220 and City’s housing affordability goals when combined with the policies recommended in the HAP and later in this document. It does not meet the 2044 job targets. This alternative could also help to reduce the Island’s carbon footprint by providing housing densities supportive of frequent transit service and by providing walkable districts where car ownership is less essential.



ALT 01 - NO ACTION

ALT 02 - WALKABLE
CORRIDORS (GO UP)

ALT 03 - MIDDLE HOUSING
EXPANSION (GO OUT)

HB 1220 1,977 DU	HAP 2,672 DU	2044 JOBS TARGET 1,927 NEW JOBS
MEETS 30% OF THE TARGET	MEETS 20% OF THE TARGET	MEETS 5% OF THE TARGET
MEETS THE TARGET	MEETS THE TARGET	MEETS 50% OF THE TARGET
MEETS THE TARGET	MEETS 90% OF THE TARGET	MEETS 30% OF THE TARGET

EXHIBIT F-2 ALTERNATIVES SUMMARY

Alternative 03, known as the Middle Housing Expansion or “Go Out,” proposes a new subarea boundary, stretching north to align with existing sewer service boundary and planned capacity. This approach increases capacity by rezoning the majority of the proposed subarea by one increment. By expanding middle housing, this alternative aligns with the current character of Winslow and meets the HB1220 housing targets. However, it falls short of meeting the employment targets set for the Island. The “Go Out” alternative has less capacity than alternative 02 to reflect on known infrastructure capacity constraints such as sewer.

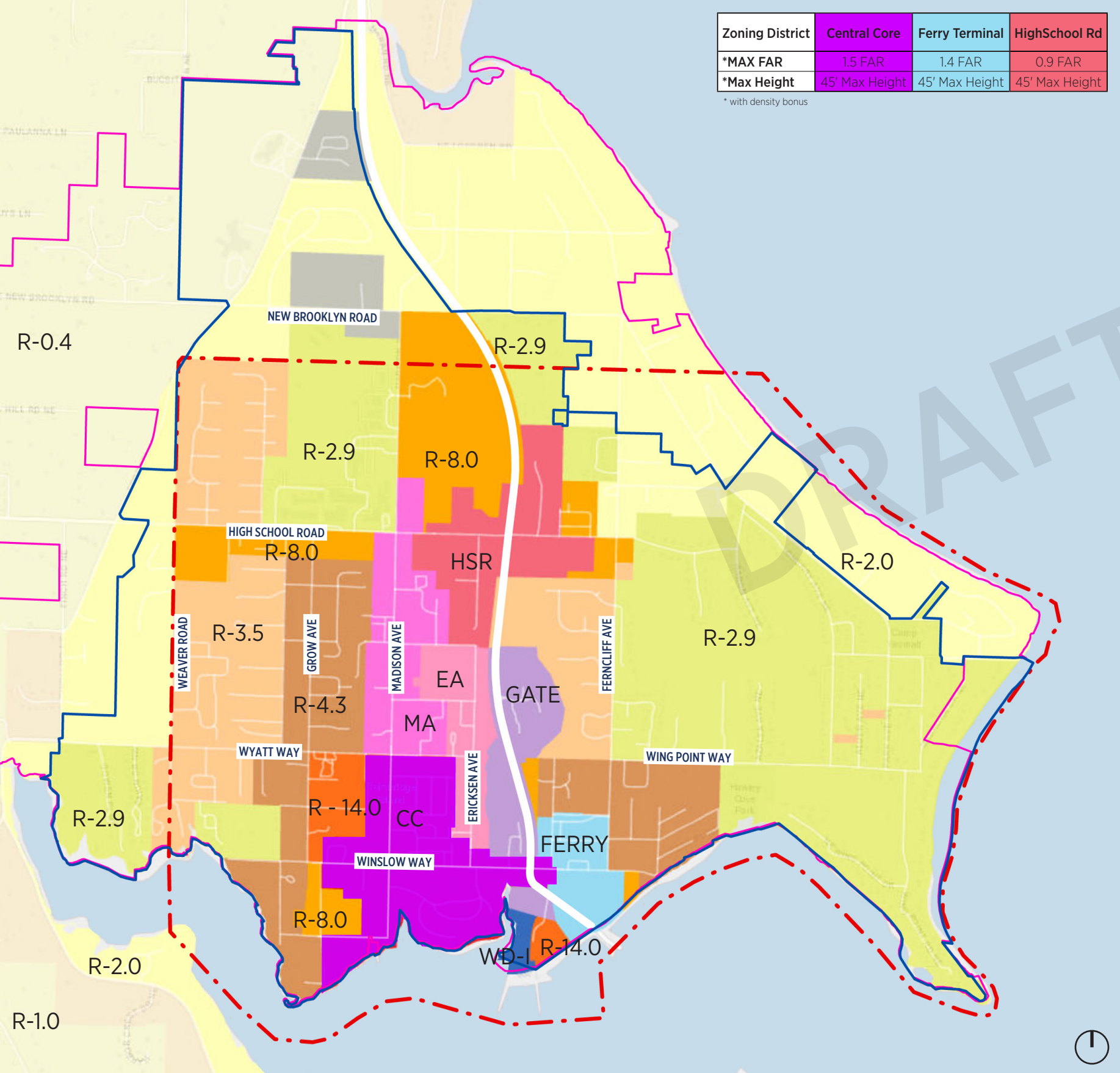
The “Go UP” alternative prioritizes housing affordability, walkability, and economic development of Winslow, while the “Go Out” alternative prioritizes alignment of growth with existing planned infrastructure capacity and character. More on these alternative can be found on pages 4 to 9.

Legend

- Single Family Residential (R-0.4 to R-4.3)
- Multi Family Residential (R-8.0 to R-14.0)
- Ericksen, Madison, and Gateway Districts
- Central Core District
- Ferry Terminal District
- High School Road Districts I and II District

- Alternative Cores
- Alternative Transitional Zone
- Active Ground Floor Corridor
- SubArea Boundary
- Winslow Water Services Boundary
- Sewer Service Area Boundary

ALTERNATIVE 01 - NO ACTION | CURRENT ZONING FRAMEWORK



Zoning District	Central Core	Ferry Terminal	HighSchool Rd
*MAX FAR	1.5 FAR	1.4 FAR	0.9 FAR
*Max Height	45' Max Height	45' Max Height	45' Max Height

* with density bonus

Alternative 01 - No Action serves as a baseline scenario, projecting forward without any further changes to existing zoning code and planning policies. It assumes reliance on the current zoning framework to produce additional housing units and jobs to meet the regulatory and planning imperatives, as well as to align with community’s aspirations.

The **No Action** alternative is evaluated based on the state, county, and local regulatory and Housing Action Plan (HAP) planning imperatives as well the three lenses of Resilience and Climate, Diversity, Equity, and Belonging (DEIB), and Community Character.

Given the current restrictive zoning code, and that 70% of land within the current subarea boundary is not suitable for multifamily development, this alternative falls far short of generating sufficient capacity to meet the regulatory and planning imperatives and targets. Based on capacity projection of year 2044, the current zoning could yield approximately 600 new dwelling units, meeting only 30% of the total islandwide HB1220 requirements, and 70 new job opportunities, fulfilling only 5% of the islandwide 2044 job targets.

Based on the current mobility and land use patterns, it is unlikely for this alternative to meet the Island’s carbon reduction and resilience goals.

The HAP contains a number of strategies to meet affordability goals, but with current regulatory and zoning limitation, it is unlikely for this alternative to meet those affordability targets.

ISLANDWIDE REGULATORY AND PLANNING IMPERATIVES	HB 1220 1,977 DU	HAP 2,672 DU	2044 JOBS TARGET 1,927 NEW JOBS
ALTERNATIVE'S PROGRESS TOWARD TARGETS	✗ MEETS 30% OF THE TARGETS	✗ MEETS 20% OF THE TARGET	✗ MEETS 5% OF THE TARGET

Legend

R - 0.4

R - 1.0

R - 2.0

R - 2.9

R - 3.5

R - 4.3

R - 8.0

R - 14.0

CC - Central Core District

Ferry - Ferry Terminal District

HSR - High School Road I and II District

B/I - Business/Industrial

WD-I - Water-Dependent Industrial

--- Current SubArea Boundary

--- Winslow Water Services Boundary

--- Sewer Service Area Boundary

EXHIBIT F-3 ALTERNATIVE 01 ZONING FRAMEWORK

2 | F. ALTERNATIVES | 24 02 06

WINSLOW 2044 DRAFT 65

NO ACTION | MOBILITY FRAMEWORK

Alternative 01 relies on the recently adopted Sustainable Transportation Plan (STP) without introducing alterations or enhancements. Both the COBI 2020 Climate Action Plan and the City of Bainbridge Island (COBI) 2022 Sustainable Transportation Plan set a target to reduce greenhouse gas emissions by 90%, by the year 2045.

The Sustainable Transportation Plan is islandwide and identifies gaps such as planning for continuous sidewalk throughout the entirety of Winslow subarea, or a pedestrian bridge over 305, when it comes to the Winslow Subarea Plan. The current population density does not support increasing the frequency of public transportation. The STP describes the need of multimodal mobility options to serve Winslow with frequent, reliable options and seamlessly connect to other neighborhood centers. More discussion on the existing conditions plan can be found on pages 23-25 of Chapter C - Existing Conditions.



EXHIBIT F-4 SUSTAINABLE TRANSPORTATION PLAN VISION

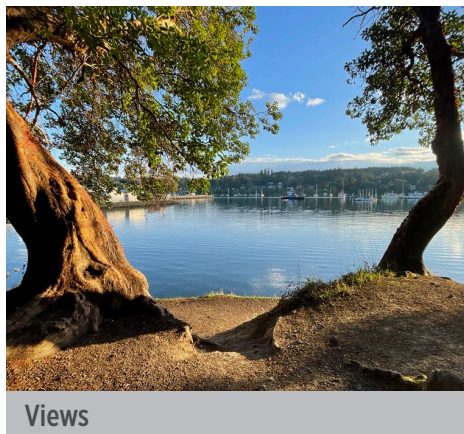
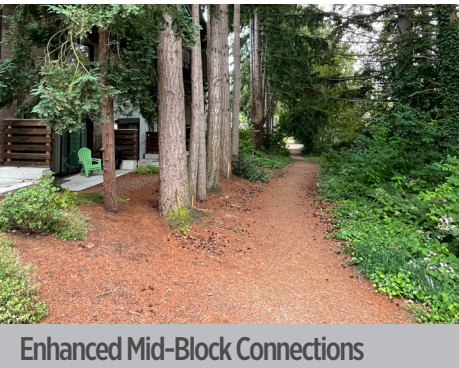


NO ACTION | OPEN SPACE FRAMEWORK

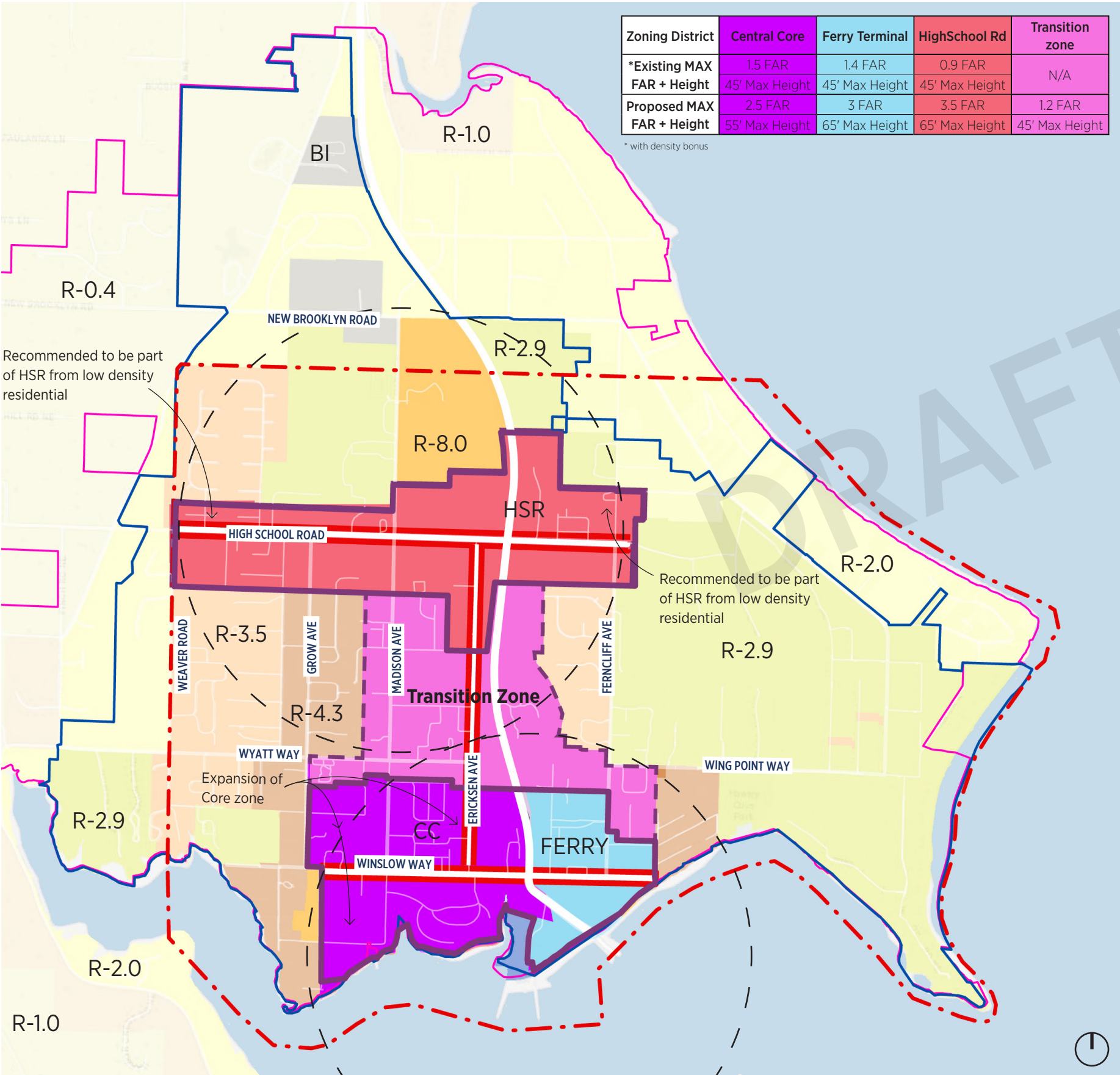
The **No Action** open space framework approach remains consistent with current policies and practices, without introducing modifications to the existing parks plan. Using a walkshed analysis, the project team has identified gaps within the parks and open spaces. The orange hatch on F-5 exhibit shows areas with limited walking/biking access to a park system as result of walkshed analysis. Community feedback described a desire for increased access to the waterfront, enhancement of year round park features, and additional trail connections to the waterfront, parks with all year round access, and additional trail connection. More discussion on the existing conditions plan can be found on pages 27-28 of Chapter C - Existing Conditions.



EXHIBIT F-5 EXISTING OPEN SPACE FRAMEWORK



ALTERNATIVE 02 | WALKABLE CORRIDORS (GO UP)



The **Alternative 02 - Walkable Corridors** or "**Go UP**" establishes denser cores along High School Road and in the Ferry Terminal Overlay District and close proximity of Winslow Way. This alternative focuses on creating a series of denser walkable corridors with active ground floors to create a traditional main street. Housing and amenities are concentrated within walking distance of transit, with a moderate increase in height and density and reduction in parking minimums and lot coverage in the centers.

The expansion of High School Road corridor captures large lots to support additional housing units, types and mixed use development. Winslow Way is connected across State Route (SR) 305 for a coherent experience. Introduction of an additional setback on Winslow Way allows for the preservation of the existing character while hiding the density. Moderate increases in density allow and encourage additional building types. This alternative consolidates some of the existing mixed-use zones into a single transition zone, creating connectivity and consistency between the two cores. It provides a transition from mixed-use cores to residential zones. The rest of the zones remain intact.

This alternative is also evaluated based on state, county and local and HAP planning imperatives as well as the three lenses. Moderate changes to the zoning code increases capacity for future development. This alternative could yields approximately 2,850 new dwelling units, meeting both HB1220 requirements and HAP recommendations, and 930 new job opportunities, fulfilling 50% of the islandwide 2044 job targets.

The strong focus on walkable corridors and the proximity of housing to amenities, transit, and jobs could result in fewer miles traveled per islander, reducing greenhouse gas emission and contributing positively to climate and resilience goals. The added multi-family residential capacity could result in the expansion of housing options, ultimately creating more affordability.

ISLANDWIDE REGULATORY AND PLANNING IMPERATIVES	HB 1220 1,977 DU	HAP 2,672 DU	2044 JOBS TARGET 1,927 NEW JOBS
ALTERNATIVE'S PROGRESS TOWARD TARGETS	✓ MEETS THE TARGETS	✓ MEETS THE TARGETS	✗ MEETS 50% OF THE TARGET

Legend

R - 0.4

R - 1.0

R - 2.0

R - 2.9

R - 3.5

R - 4.3

R - 8.0

R - 14.0

CC - Central Core District

Ferry - Ferry Terminal District

HSR - High School Road I and II District

B/I - Business/Industrial

WD-I - Water-Dependent Industrial

0.5 Mile Walking Radius

Cores / Walkable Corridors Zone

Transitional Zone

Active Ground Floor Corridor

Current SubArea Boundary

Winslow Water Services Boundary

Sewer Service Area Boundary

EXHIBIT F-6 ALTERNATIVE 02 ZONING FRAMEWORK

ALTERNATIVE 02 | MOBILITY FRAMEWORK

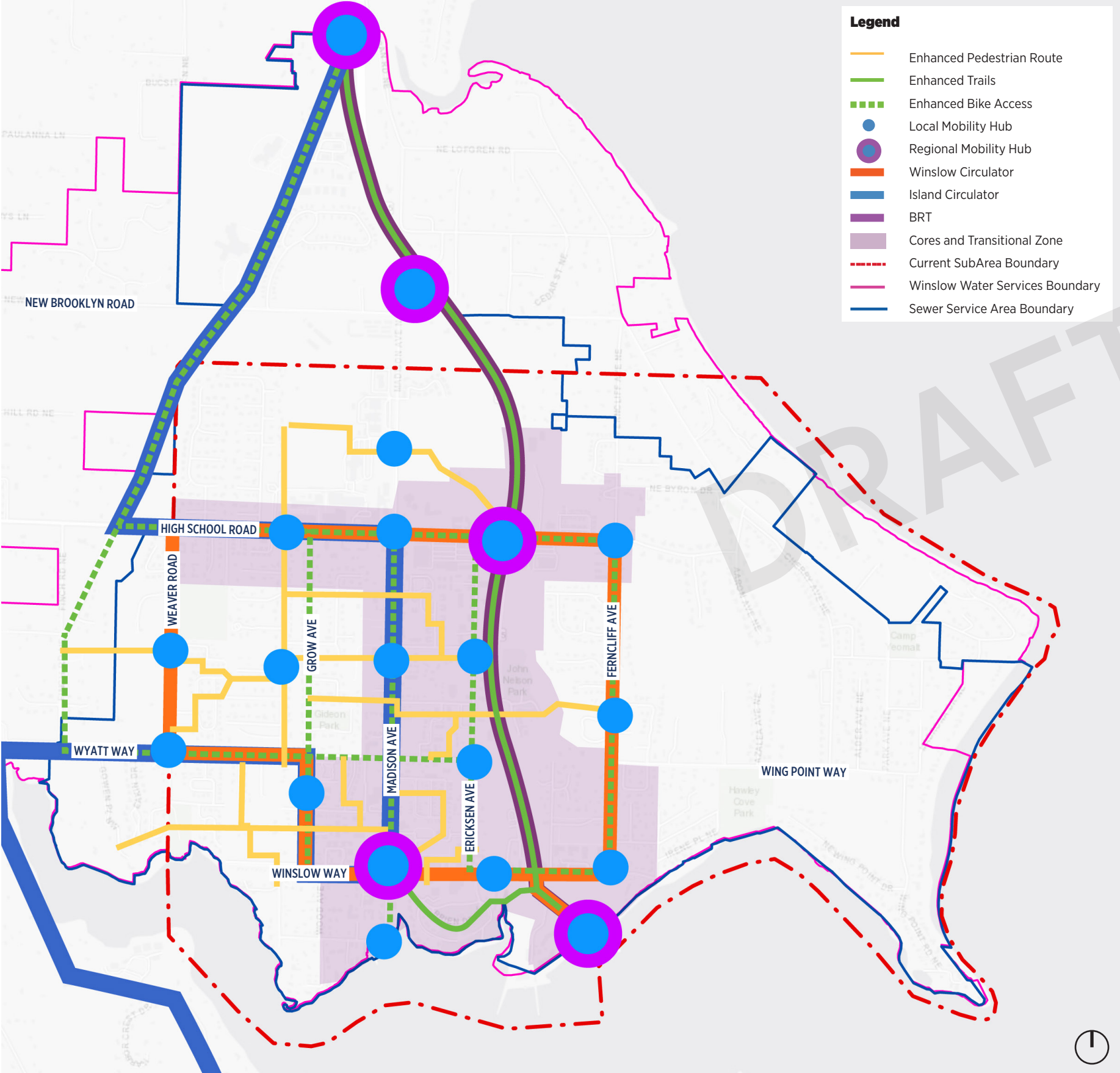


EXHIBIT F-7 ALTERNATIVE 02 MOBILITY FRAMEWORK

Alternative 02 builds upon the Sustainable Transportation Plan (STP), while recognizing gaps within existing plans. This mobility plan aligns with the vision of creating walkable districts, effectively reducing dependency on personal vehicles. This mobility framework focuses on strategies such as:

Island Circulator: Kitsap County Long Range Transit plans for an Island Circulator connecting Winslow to the rest of the Island. The density produced by the **"Go UP"** alternative potentially increases ridership supporting bus rapid transit as a viable and efficient transportation option, with stops at Winslow Way, Madison Ave, and High School Road.

Winslow Circulator: The STP identifies Winslow Circulator, a shuttle route that connects Winslow Way to High School Road for regular and accessible transit within the subarea. The Winslow Circulator could work with conjunction of the Island Circulator for an enhanced Island wide connection.

Regional Mobility Hubs (Tier 01): Strategic allocation of regional mobility hubs, located at the intersection of SR305 and High School Road as well as Winslow Way and the Ferry Terminal, facilitates transit between different modes. The hubs could provide multimodal connectivity like shared EV, and transit options such as shuttles, buses, BRT, and ferry services.

Local Mobility Hubs (Tier 02): Local hubs extend coverage and accessibility throughout the subarea. The local hubs accommodate micro mobility options such as charging stations.

Bike and Pedestrian Infrastructure: This framework prioritizes improvements to bike and pedestrian infrastructure by creating continuous sidewalks, trails and protected bike lanes. Mid-block connections are emphasized to enhance east-west connectivity.



ALTERNATIVE 02 | OPEN SPACE FRAMEWORK

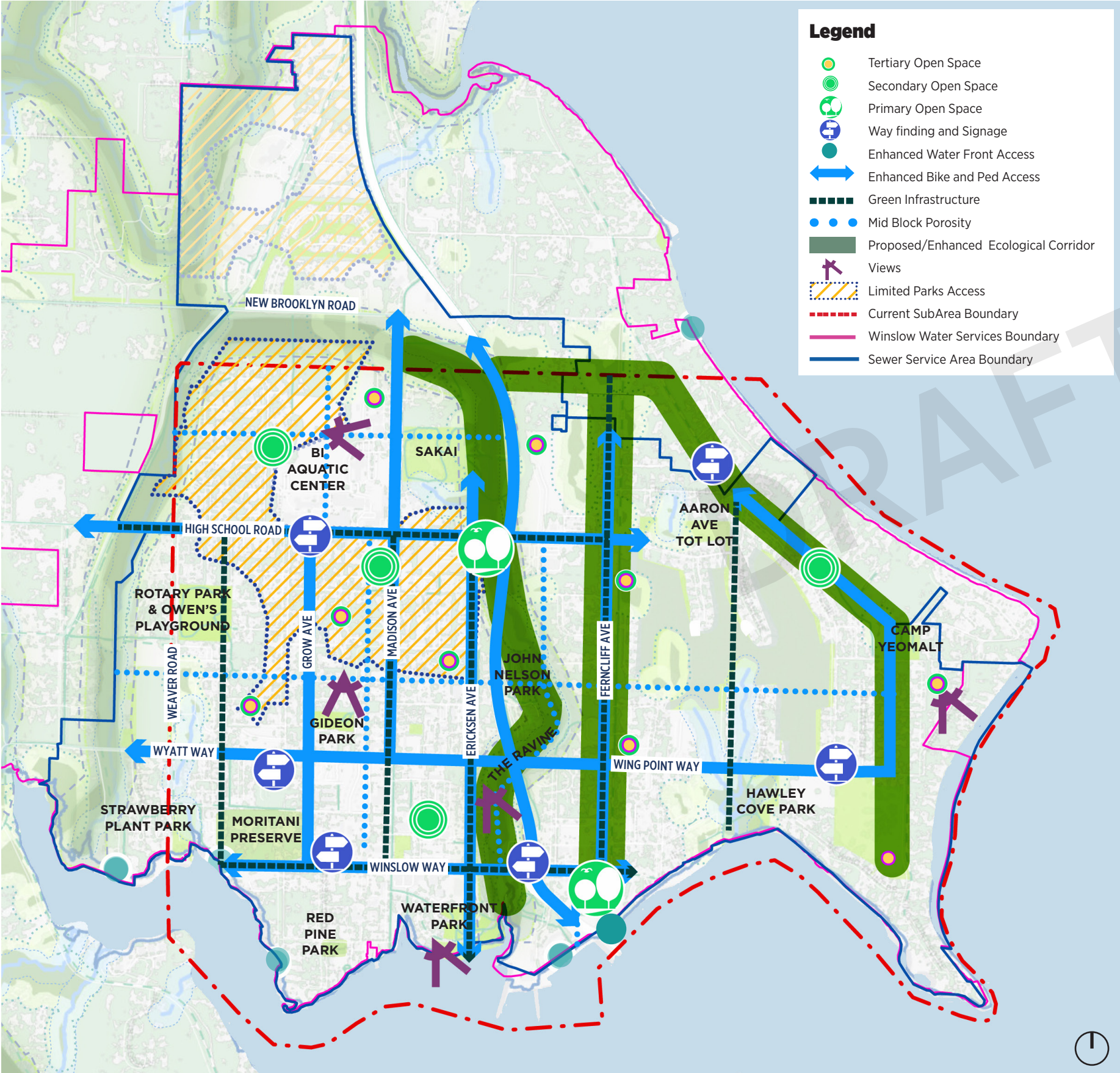


EXHIBIT F-8 ALTERNATIVE 02 OPEN SPACE FRAMEWORK

The open space framework prioritizes the preservation and enhancement of ecological resources, and provides equitable access to open spaces for all residents. It introduces a hierarchy of open space, prioritizing proposed land use cores and areas with limited access for preservation and enhancement of open space with all year round access. Maintenance and enhancement of existing parks are top priorities, with additional measures being considered to expand the current park systems.

Primary open space: Strategically located at the ferry terminal and in proximity of High School Road and SR 305 intersection, this typology serves as a gateway to the Island and a focal point for community activities. This space plays a central role in creating a vibrant and welcoming entrance to the subarea and could be accommodated on development parcels through zoning and streetscape requirements.

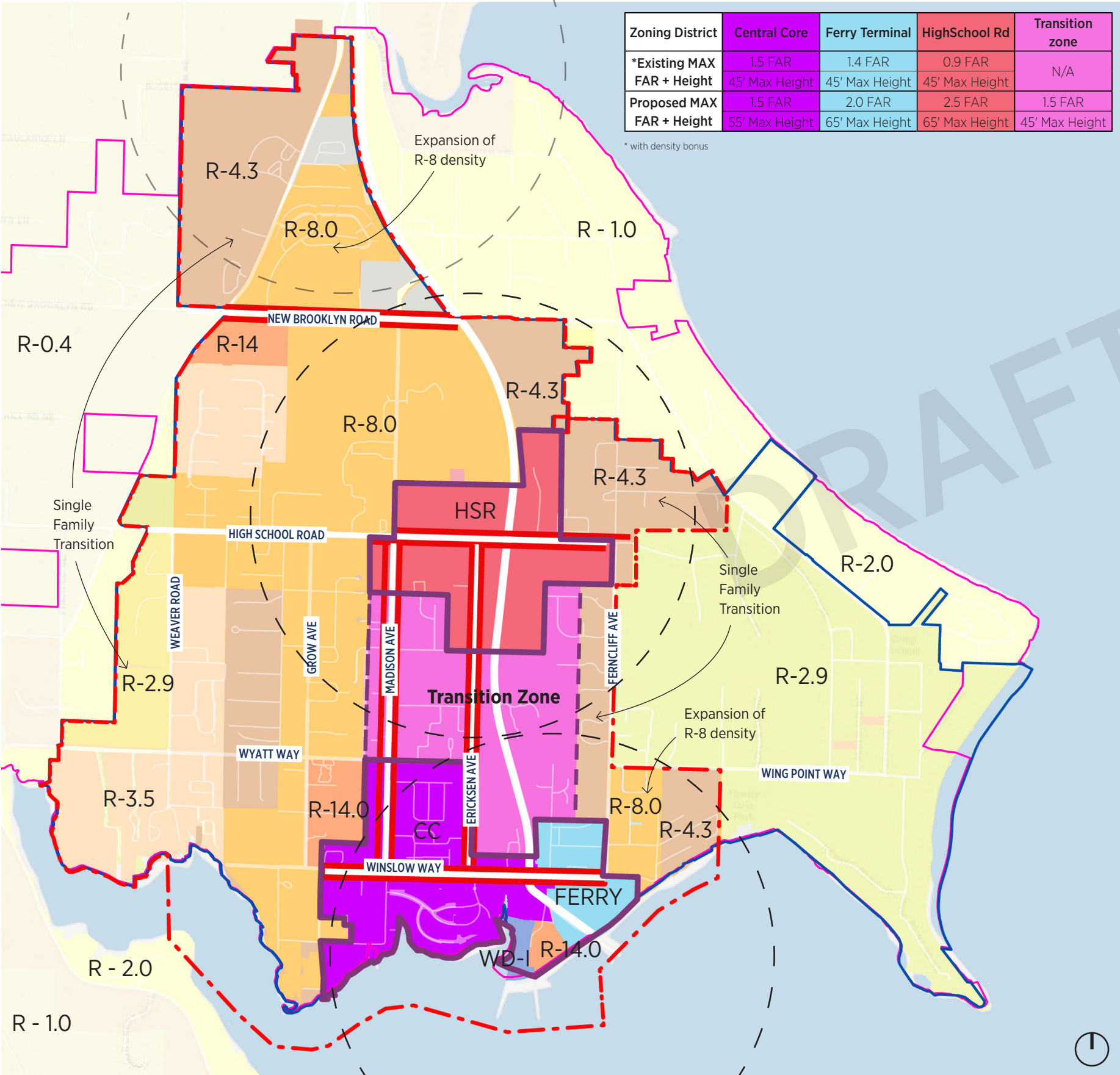
Secondary and Tertiary Open Spaces: These typologies prioritize areas with limited access to existing parks to address community needs and enhance the overall quality of life. Playgrounds, dog parks, local trails, and mid block connections are examples of secondary open space. Seating, shade structures, publicly accessible easements to capture views to the sound are examples of tertiary open spaces.

Enhanced Access to Water: Enhancing access to water, particularly near the ferry terminal could create waterfront spaces that offer residents and visitors an opportunity to enjoy the scenic views and waterfront activities.

Expansion of Trails and Mid-Block Connection: The framework prioritizes mid-block porosity through enhanced connectivity, emphasizing the importance of trails and pedestrian pathways to create a network of interconnected open spaces, promoting walkability and accessibility that builds on the existing networks.



ALTERNATIVE 03 | MIDDLE HOUSING EXPANSION (GO OUT)



Zoning District	Central Core	Ferry Terminal	HighSchool Rd	Transition zone
*Existing MAX FAR + Height	1.5 FAR 45' Max Height	1.4 FAR 45' Max Height	0.9 FAR 45' Max Height	N/A
Proposed MAX FAR + Height	1.5 FAR 55' Max Height	2.0 FAR 65' Max Height	2.5 FAR 65' Max Height	1.5 FAR 45' Max Height

* with density bonus

The Middle Housing Expansion or "Go Out" alternative captures additional residential capacity by expanding on middle housing within a realigned subarea boundary.

This alternative proposes a change in boundary that aligns with the sewer service area to accommodate future development, and removes the Wing Point single family residential area from the subarea.

This framework expands the capacity for middle housing types by a one step increase in the current zoning. For instance, the one step increase proposes a portion of existing R-4.3 to adopt R-8.0 zoning code to provide a broader range of housing choices. This alternative allows lower-density middle housing types, encouraging the development of townhouses, duplexes, triplexes, stacked flats, cottage housing and garden apartments. Height and FAR are slightly increased in centers compared to Alternative 02, and amenities are distributed within neighborhoods through required active ground floors along the commercial corridors. The transition zone consolidates some of the existing zones into a single transition zone, creating connectivity between the two cores and single family residential. The edges of the new subarea boundary are zoned to create a transition into Island's single family residential.

Based on projected capacity by the year 2044, this alternatives could yield approximately 2,400 new dwelling units, which could meet the HB1220 requirements but falls short from the HAP target. **Alternative 03** adds 700 new job opportunities, fulfilling 30% of the islandwide 2044 job targets. The projected housing capacity is aligned with existing planned sewer capacity.

The slight increase in density, and distributed amenities changes the land use pattern from the current single use to a mixed use land-use model, reducing the need for vehicle use, ultimately contributing positively to the climate and resilience goal. **Alternative 03** generates a housing stock consisting of townhomes, cottages, duplexes/triplexes, and stacked flats, which already exist within Winslow. This approach maintains the area's character while addressing the critical need for additional housing inventory.

ISLANDWIDE REGULATORY AND PLANNING IMPERATIVES	HB 1220 1,977 DU	HAP 2,672 DU	2044 JOBS TARGET 1,927 NEW JOBS
ALTERNATIVE'S PROGRESS TOWARD TARGETS	MEETS THE TARGETS	MEETS 90% OF THE TARGET	MEETS 30% OF THE TARGET

Legend

- R - 0.4
- R - 1.0
- R - 2.0
- R - 2.9
- R - 3.5
- R - 4.3
- R - 8.0
- R - 14.0

- CC - Central Core District
- Ferry - Ferry Terminal District
- HSR - High School Road I and II District
- B/I - Business/Industrial
- WD-I - Water-Dependent Industrial

- 0.5 Mile Walking Radius
- Cores / Walkable Corridors Zone
- Transitional Zone
- Active Ground Floor Corridor
- Proposed SubArea Boundary
- Winslow Water Services Boundary
- Sewer Service Area Boundary

EXHIBIT F-9 ALTERNATIVE 03 ZONING FRAMEWORK

ALTERNATIVE 03 | MOBILITY FRAMEWORK

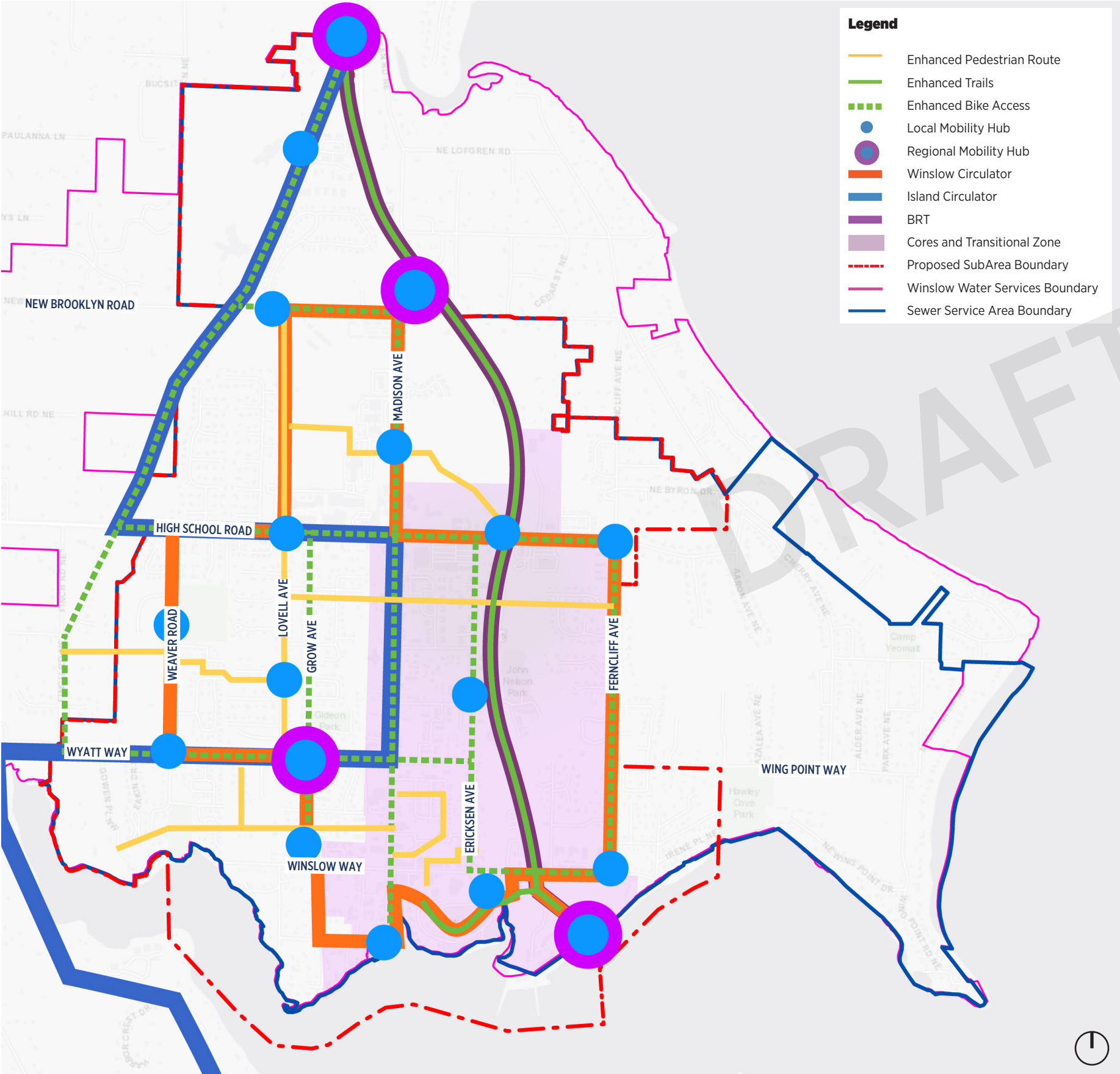


EXHIBIT F-11 ALTERNATIVE 03 MOBILITY FRAMEWORK

Similar to alternative 02, this alternative enhances mobility choices for all by introducing the Island and Winslow Circulators, mobility hubs, and improved bike and pedestrian infrastructure. The framework is shaped by the realignment of the Winslow Subarea boundary and extends the mobility core north of New Brooklyn Road, creating more north-south connections.

The **"Go Out"** alternative introduces a modified alignment for the Winslow Circulator, extending it to the New Brooklyn Road. Regional hubs are located at Wyatt and Grow Avenue, and in proximity to the New Brooklyn Road. They provide major multimodal and extended coverage and accessibility through subarea. There are opportunities for TOD and Station Area Plan at cores and New Brooklyn road due to the concentration of housing and amenities.

Winslow Way, Wyatt Way, High School Rd, and New Brooklyn Rd share the load for east-west travel while Sportsman Club Rd and Ferncliff Ave provide north-south travel on edges of subarea. A Pedestrian Bridge over SR 305 connects the two sides of the ravine. Grow Ave, Lovell Ave, Ericksen Ave, and provides enhanced pedestrian connection through subarea.



ALTERNATIVE 03 | OPEN SPACE FRAMEWORK

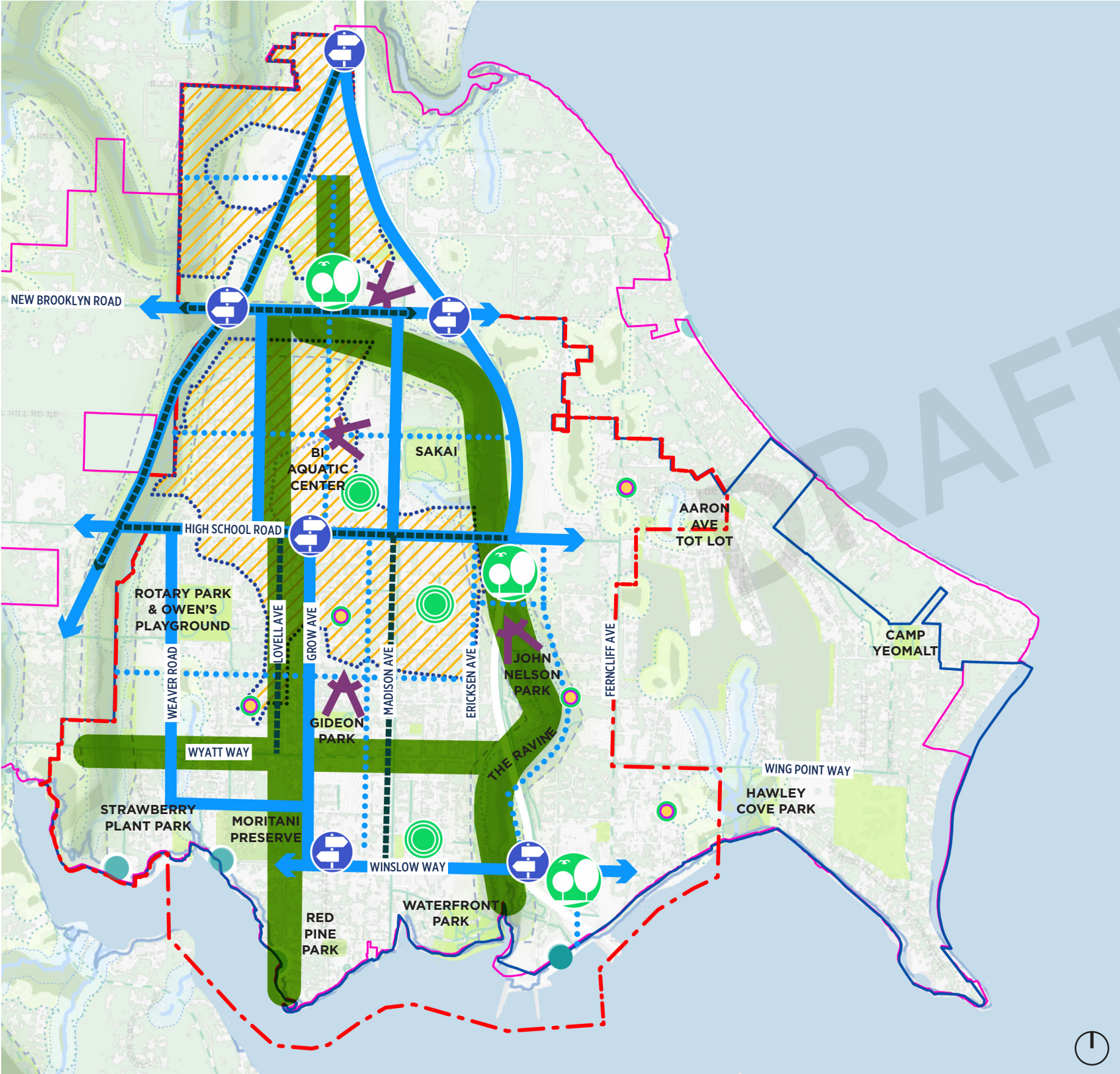


EXHIBIT F-12 ALTERNATIVE 03 OPEN SPACE FRAMEWORK

Similar to alternative 02, this framework prioritizes ecological preservation, equitable access to open spaces, and creation of all year round vibrant gathering places within the subarea. The "Go Out" alternative prioritizes hierarchy of open spaces, specially north of High School Road, and emphasizes the enhancement of north-south bike and pedestrian infrastructure. This alternative introduces additional ecological corridor on Lovell Avenue and Wyatt Way. These corridor can take shape as pollinator pathways or bioswales integrated into righ of way improvements, contributing not only to the ecological health of the subarea but also providing an enhanced natural environment for residents to enjoy.



- Legend**
- Tertiary Open Space
 - Secondary Open Space
 - Primary Open Space
 - Way finding and Signage
 - Enhanced Water Front Access
 - Enhanced Bike and Ped Access
 - Green Infrastructure
 - Mid Block Porosity
 - Proposed/ Enhanced Ecological Corridor
 - Views
 - Limited Parks Access
 - Proposed SubArea Boundary
 - Winslow Water Services Boundary
 - Sewer Service Area Boundary



Orientation Interview Summary

2024 Comprehensive Plan Periodic Update

City of Bainbridge Island
Department of Planning and Community Development

January 12, 2024

Introduction

The City's Comprehensive Plan periodic update consultant team conducted a series of orientation interviews with members of the Bainbridge Island community, intended to provide an introduction to the topics and issues on the community's collective mind and to shape the project's approach to optimize community engagement. City staff suggested a diverse list of individuals to invite, and SCJ Alliance (one of the consultant team members) sent out the invitations and scheduled interviews with those who agreed to participate. SCJ Alliance and Nexus Planning conducted the interviews in September 2023, both in person and virtually.

Interviewees

The interviewees represented a spectrum of community organizations and interests. Some are from families who have lived on the island for generations. Others are relatively new arrivals. Some are retired. Others are in the workforce and have children in local schools. All are interested in Bainbridge's future and volunteered their time to meet with the consultants and offer their ideas about what is happening on the island, what they hope for, and how this process might be run to ensure the community is actively and effectively engaged.

Table 1: List of Interviewees

Date	Interviewee	Affiliation
September 13	Stefan Goldby	Chamber of Commerce
	Phedra Elliott and Maggie Rich	Housing Resources of Bainbridge Island
	Deb Rudnick	Watershed Council
	Micah Strom	Modern Collision
	Joe Clark	City of Bainbridge Island
	Reed Price	Senior Community Center
September 14	Kellen Bond	Clark Construction
	Courtney Oliver	Bainbridge Youth Services
	Peter Bang-Knudsen	Bainbridge Public Schools
September 15	Els Heyne	Bay Hay and Feed
	Mria Meltzer	Helpline House
	Brenda Padgham	Bainbridge Island Land Trust
September 21	Anne LeSage	City of Bainbridge Island
September 22	Autumn Salamack	City of Bainbridge Island
September 25	Heather Burger	Friends of the Farms

Individual conversations were conducted on the basis of confidentiality. This summary is designed to summarize comments with no intention of attribution.

Topics

The interviews covered a broad range of topics, all of which may be relevant to the comprehensive plan and many of which inform issues the new plan must address. These statements are drawn from the conversations and represent the thoughts interviewees expressed, not necessarily facts or verified trends.

Senior center involvement

There are more than 1,800 members of BI's senior center, representing a large group of island constituents organized within a single institution.

Relationship to Winslow Subarea Plan

Interviewees asked about this process' relationship to the Winslow planning effort, wanting to ensure the two processes are coordinated and represent an island-wide perspective on the community's future.

Need and opportunity for senior housing

Interviewees noted many seniors on the island are downsizing from their larger, more remote single-family homes and looking for more modest housing options (both detached and attached) within or near Winslow.

Political and topical conflict

Some interviewees mentioned the tendency for the community to divide itself on issues, sometimes based on larger political or philosophical ideology, and fail to recognize commonality which may exist.

Comprehensive plan vision importance

The comprehensive plan's vision is a crucial place for people to agree, and the vision should be reviewed, revised as necessary, and then used as a touchstone for every policy and action the balance of the plan proposes, according to more than one interviewee.

Council collaboration

Interviewees appreciate the degree of apparent City Council collaboration now, even though some noted it may not always result in speedy action.

Local workforce and affordability

Multiple interviewees addressed housing affordability, particularly as it relates to people with jobs on the island and the business community's inability to pay wages high enough to allow employees to compete for housing locally or encourage them to remain working in Bainbridge.

Mobility variety

Interviewees appreciate opportunities to walk, ride a bike or take a bus, and they also understand some environments and roadway corridors are better suited for non-automotive travel than others.

Healthcare facilities leaving

Interviewees are concerned the closing of healthcare facilities will impact the community's ability to serve resident or visitor medical needs. Some see it as a potentially problematic indicator, increasing the island's dependence on Seattle for crucial services.

Racial diversity

Several interviewees spoke to the community's relative racial homogeneity, with the island's overwhelming "whiteness." Others, however, reflected on what diversity the island has been able to honor or maintain, noting the Japanese and "Indipino" elements which shaped much of what Bainbridge would become. Most would welcome more diversity and see island land values and its high cost of living as daunting barriers.

Converting farmland

Interviewees mentioned the pressure to convert farmland on the island to accommodate the growing need for housing and the sustained preference for single-family development. Most advocated for expansion of the Winslow boundary – and its sewer service – to accommodate conversion, but almost all appreciate what the community's rural landscape contributes to the island's identity.

Rural-like nature and individuality

Citing the island's unique mix of urban and rural-like spaces, interviewees identified a persistent rural-like lifestyle preference. Some island residents, they say, choose to be here because of the availability of large-lot living and freedom from nearby neighbors. They understand the mixed character within the city limits is unique to Bainbridge, making it sometimes difficult to reconcile city needs with rural-like desires.

Transportation network modal priority/sharing

Some interviewees identified concerns about the way the community's roads are designed or managed to accommodate various modes of travel, either dedicating too much space to bikes and inappropriately reducing speeds or, alternatively, neglecting safety needs of pedestrians and cyclists.

Concern for Property Theft

An interviewee spoke about the general concern for commercial and residential property theft on the island.

SR 305 roundabouts

Interviewees pointed to the new Highway 305 roundabouts as either welcome or inappropriate. However, most recognize their need, even if they object to their design.

Managing ferry traffic

People cut in line to access the ferry, mostly at the Winslow Way intersection. Interviewees indicated this intersection should be the main concern addressed relating to ferry traffic.

Island Center subarea planning process

Interviewees asked about the Island Center subarea planning process, disappointed in the City Council's decision to abandon it and dismiss the work the community had done to support it. Interviewees still see Island Center as an example of what can be done to involve community energy to figure out how to shape and support neighborhood centers as a Winslow alternative.

Traffic congestion/"drive 'til you qualify"

Interviewees pointed to increased traffic flows on SR 305 as an effect of the island's lack of housing affordability. Many who work on the island cannot afford to live on it, so they find affordable housing many miles away and add to SR 305 commuting traffic as a result.

Grandfathered and non-conforming structures

Much of the island's charm is rooted in its older structures, according to several interviewees. They are concerned new development will create new projects vastly different from what exists now, threatening those things which make the island unique.

Vocal opponents to change

While some interviewees welcome the opportunities change can bring and acknowledge change's inevitability, they recognize community elements who seem determined to resist it. These interviewees point to those who have invested in a particular island lifestyle who may feel threatened by population growth and the development of new housing to support it.

Trails

Interviewees believe the island's trails are an important community asset and hope to expand them – particularly in and around Winslow – to accommodate those using them for recreation or daily transportation.

Lynwood Center as historic model of higher intensity

Interviewees consider Lynwood Center as a model for higher intensity development if Bainbridge Island wishes to develop neighborhood centers elsewhere.

Rationale for change management

Interviewees believe the City must enhance its public messaging on the need to manage change.

Workforce housing partnerships

There are several organizations working to provide more affordable housing, and interviewees appreciate the work the organizations have done, individually and as partners, to make housing available. They would appreciate any creativity and initiative the City can offer, too, within its ability.

Aging in place

While some of the island's senior households look to downsize and move closer to Winslow's services, others prefer to age in their larger, more remote homes. Interviewees noted the availability of services to support this choice, though they question how long the services can be maintained given economic trends.

Economic influences favoring home ownership

Interviewees mentioned the larger economic forces favoring homeownership over renting, with householders preferring to own and build equity than to rent and retain options for mobility. This plays out with the market favoring construction of single-family or townhome housing types rather than market-rate rental housing.

Workforce housing example projects

Interviewees pointed to several affordable housing projects on the island and described the different approaches used to bring them online, using a land trust model, outside funding support, or local partnerships.

Sewer limitations

Interviewees identified the limited availability of sewer service as the primary limiting factor for expanded Winslow or rural center development.

Rent influences

Rents in Bainbridge are generally high, with those near the ferry landing in Winslow approaching rents seen in Seattle.

Second (or third) homes

Interviewees mentioned the high number of second homes on the island which remain unoccupied for much of the year. Interviewees believe they contribute to the scarcity of available housing, consume land inefficiently, and, in the eyes of some, increase local rents by their occasional availability as vacation rentals.

Light manufacturing

Light manufacturing and locally-owned value-added businesses are taking root on the island, offering niche products to certain markets.

Tourism impact on economy

There are more than 70 eating and drinking establishments on Bainbridge, most of which are located in Winslow. Interviewees note this is a reliable indicator of the importance of Bainbridge's tourism sector, where visitors support a large segment of island businesses.

Clustering and density transfer

Interviewees believe Bainbridge offers opportunities for density transfer and development clustering, preserving open spaces and concentrating development intensity in Winslow, neighborhood centers, and other locations where it can best be served.

Ideals versus implementation capacity/will

Some interviewees characterized Bainbridge Island leaders (governmental and community) as overly ambitious, failing to follow through on promised actions or on community-supported initiatives. Some interviewees consider this a result of the City simply being too busy. Others characterize it as a more deliberate choice to stall.

Increased city government transparency

Interviewees appreciate what they perceive to be an increase in the City's transparency in governance.

Urban/rural character conflict

Some interviewees believe the community can do a better job appreciating and acknowledging the character differences between the urban centers and Conservation areas, with those residing in each environment assuming appropriate responsibilities associated with those forms of living. Some cited residents' desire for convenient urban services in the Conservation Area and urban center residents resisting new urban development as evident contradictions.

Coordination with Suquamish Tribe

Some interviewees believe there are untapped opportunities to coordinate with the Suquamish Tribe, particularly in terms of visitor accommodation and economic development.

Rising sea level

Interviewees spoke about rising sea levels and some of the effects becoming visible on the island's shorelines. They identified Point Monroe and Murden Cove as being particularly vulnerable.

Reduced housing footprint

Some interviewees believe it advisable to consider requiring smaller single family houses, claiming the larger homes being constructed today are far too large for their intended occupancies and consume more materials than necessary. This drives up prices for others.

Importance of local actions

Some interviewees underscored the importance of local actions and how they relate to larger priorities. They noted some actions may be taken in conflict with stated aims, such as requiring intensive development permit review while calling for more housing to be built. Other actions in line with stated aims were also seen as insignificant or only token gestures, such as instituting a "cup fee" to help curb solid waste demand.

Fletcher Bay Aquifer

Interviewees mentioned the Fletcher Bay Aquifer as one of the community's public water resource, tapping a source 800' down. They indicated aquifer recharge strategies will influence much shallower groundwater, pushing for conserving what is drawn from Fletcher Bay.

Non-motorized travel challenges

The weather, terrain, distance between destinations, and absence of regional bike facilities hinder more complete adoption of non-motorized travel on the island, according to these conversations.

Geological hazards

Interviewees believe there are geological hazards impacting development potential on the island, particularly along coastal bluffs.

Household age shift

The community's median household age is rising, and several interviewees noted this as a concern.

Declining school enrollment

One of the impacts of rising household age is a corollary decrease in the number of school-age children. Interviewees confirm school enrollment is on the decline, a steady trend over the past decade.

Anti-development attitudes

Some interviewees are concerned the anti-development attitudes in the community have the net result of increasing land values, extending permit review times, and hindering the development and availability of housing, particularly for those households earning less than 120% of the area's average median income. Interviewees used the term "NIMBY" to describe those who advocate for new development, but not near their own neighborhoods.

Family-oriented planning/design

Interviewees are interested in seeing the community more accommodating of family needs, designing places, streets, and activities to support families.

Fort Ward for families

At least one interviewee pointed to the Fort Ward neighborhood as an example of family living on Bainbridge, where the neighborhood is a hot spot for Halloween and other child-oriented activity.

Non-profit donors

Some interviewees said the island's support of charitable organizations is shrinking and local community contributions are declining. They noted the same group of donors are sought after by organizations, leading to interorganizational competition for access to a diminishing resource.

Transfer of homeownership

Younger heirs are inheriting island housing and, because of the lack of professional-level employment on the island, costs of homeownership, or other reasons, often elect to sell the property rather than reside on the island. This is impacting the generational continuity of island families.

College-focused education

Interviewees noted the island's educational system and social pressures are geared to prepare students for a college education, pointing students to leave the island upon graduation from high school. Those students who do not wish to attend college are less well served, according to interviewees.

Evening life

The island's evening life is limited. In the eyes of at least one interviewee, it is a difficult place to be single.

Ferry connection to Seattle

Island residents have a challenging relationship with the ferry, depending on it to access metro Seattle and concerned by the through-traffic it generates on SR 305. It is crucial to Winslow's economic success and has driven pressure to develop housing nearby to accommodate commuters to Seattle's downtown.

Resident age gap 18 – 35

The rising household median age and the push for a college education offered elsewhere has resulted in a gap in the 18 – 35 year old cohort, according to interviewees.

Permitting time

Interviewees commented about the time it takes to get land use and building permits reviewed and approved, citing examples of housing plans subject to multiple months of process with little progress in obtaining the desired permit.

New housing construction types

Making different construction types more easily approved could help provide needed housing, according to interviewees, looking to explore ideas of cross-laminated timber, mobile homes, tiny homes, or cargo containers as possible options.

Winslow outer boundary

Interviewees are interested in expanding Winslow's outer boundary and extending sewer service to areas beyond Sportsman Club Rd.

Incentives for development

Some interviewees are interested in incentives the City or others may offer to support desired development types.

Staff culture of fear

Interviewees stated concerns the City's staff operate overly cautiously, seemingly scarcely rewarded for their successes or creativity and often shamed for mistakes or alternative points of view.

Policy/zoning clarity

Interviewees asked for consistency and clarity in the City's policy and development regulations.

Relationships with other Kitsap County towns

Bainbridge Island is part of Kitsap County, but some interviewees believe the community does not take advantage of the opportunities or accept its share of responsibilities in relation to the rest of the county.

Short-term rentals

Bainbridge is a tourist destination, and interviewees are concerned about how short-term rental units may increase rents for full-time residents and impact neighborhood character.

Land use efficiency as public good

Some interviewees argued for more compact development in both urban and rural areas, stating using land more efficiently should be considered a public good, required by law and incentivized as appropriate.

Mobile home park near City Hall

The existing mobile home park near City Hall was identified by interviewees as a good example of how that type of housing can be an effective, desirable option for providing more affordability and the benefit of home ownership.

Mental health shame

Interviewees noted a "hidden" mental health issue on the island, where those needing or seeking mental health care can feel shunned and diminished. The demand is there for service, but, in the eyes of interviewees, it goes only partially addressed.

Wealth shame

Interviewees also spoke about the island's relative wealth and how the impression of being less wealthy can impact the esteem of those struggling to make their household budgets.

Open space and farmland conservation

Interviewees spoke of opportunities for and benefits of conserving open space and farmland, looking to land trusts or other instruments to limit farmland conversion, preserve sensitive ecosystems, or support economic viability of small-scale farms. Priority should be also thinking about climate change and its affect on water supply. Resilience to climate change should determine what could and should be planted. We need to understand the island's groundwater supply and protect groundwater recharge areas.

Housing

There is a high percentage of staff that live off of the island (60% – 65%). We say that we want diversity (housing, and social) but the City cannot accomplish this without affordability. With the average SFR on the island costing 1.3 million dollars, and a monthly cost of \$1,200 for a 200 sq ft apartment, this is not feasible for housing the Island's agricultural workers. Farmers need a place to live. Workers need a place to live. The City could look more into the tiny house movement. They should be allowed. There are projects that are constructing tiny houses made of recycled materials on farm properties. The project as developed by the Friends of the Farms organization in partnership with the Housing Resources Board a local construction / design firm.

Priorities

There are also competing priorities between city council and the community. The priorities of the council and that of the community are fractured. There are too many items which staff is unable to facilitate. There should be an identification of the top five priorities, which include Affordable Housing and Sustainable transportation, both of these are doable.

Solid-waste management

Solid-waste management is also a high priority on the climate adaptation / mitigation front. The solid-waste management company is currently not subject to contractual obligations with the City. It is only subject to the WA utilities and transportation commission rules. Policies for solid-waste management could also include a service to manage and support organic waste management and composting. More public education is also needed, which the current private solid waste management provider does not do.

Natural systems

Suggestion of more work, advocacy and education is needed around natural systems. These include tree canopy goals, protecting wetlands and natural habitats for carbon sequestration for climate change mitigation.

Climate change

Climate change affecting sea level rise is a topic of concern as it affects both public investments such as roadways and impacts millions of dollars of private property investment. The City's climate-related goals must also be coupled with its goals for equity and inclusion but ensure island wide sustainability.

Transfer the development rights

TDR is in Goal 15 In Environment Element – Environmental policy – 15-1, Transfer of Development (Property) Rights, which states “Provide owners of farms the option of participating in the transfer of development rights (TDRs)/purchase of development rights (PDRs) program.” These policies / priorities should float to the top for the comp plan.

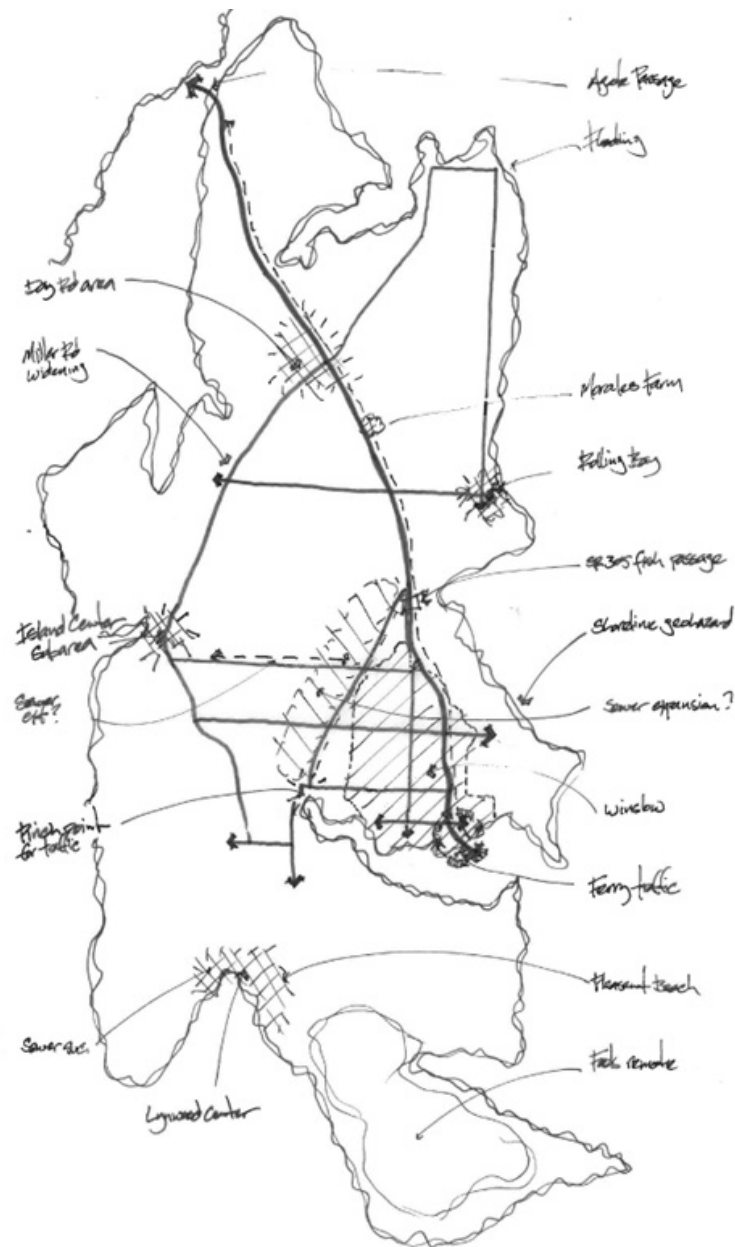


Figure 1 - Spatial map suggestions during orientation interviews

Spatial Notes

The map shown here was built during the interviews, locating topics or issues of special or spatial concern. Many comments centered on Winslow and its ability to accommodate new population growth, its potential for expansion, and its role as the island's primary urban center, with a mix of auto, bike, pedestrian, and public transportation activity, tourism, health care, employment, and commerce. Other comments tended to gather near other "centers" on the island, including Lynwood, Island Center, Day Road, and Rolling Bay, noting their contribution to island character and their potential to evolve to either accommodate new residents or attract more business. Comments also focused on Bainbridge's coastal areas, their development and their vulnerability to the impacts of climate change.

Issues

The topics emerging from the interviews seemed to coalesce around a set of issues, focusing on economics, social connections, safety, relationship to the natural world, community institutions, and connections to the region.

Wages and housing

The island is an expensive place to live, and the businesses on the island are unable to pay wages or salaries high enough to allow many of those who work on the island to live on the island. Limited developable land for multi-family and missing middle housing in Winslow and a preference for low-density single-family housing further restricts what housing might be available for those earning a living locally.

Institutional bias in housing types

Lenders, insurers, zoning, and community advocates tend to favor detached single-family housing types, making it difficult to permit, develop, and sell attached housing types, like townhomes or condominiums.

Tourism as an economic engine

The tourism sector fuels much of the island's retail and dining sectors, supporting the abundance and diversity in services island residents enjoy. This relationship may not be universally understood or appreciated.

Charitable giving on the decline

The island's charitable giving pool is growing smaller. The reliable donors are aging, and there are fewer younger donors taking their place. The island's social services network is being impacted, and the interorganizational competition for resources may diminish opportunities for effective partnerships or collaboration.

Effects of social comparison

The emergence and separation of a social underclass – as a result of mental health or relative wealth – can grow a sense of disenfranchisement and disempowerment. Bainbridge residents appear to support diversity, potentially including broader acceptance of those who may need care that the community's social context may not easily embrace.

Impacts on and emphasis in education

The school district is facing declining enrollment and, as a result, declining revenues. The schools also face pressure to prepare students for a college education, focusing on academics more than vocational training. This creates a pipeline off island for the more successful students and may not as well equip others for a rewarding non-college future on the island. Addressing this would ask the district to increase its programming options with declining resources.

Encouraging non-auto travel

While Bainbridge Island has invested in facilities for non-motorized transportation, some believe it should do even more, both within Winslow and in the more rural-like areas. Successfully doing this may rely on intensifying land use development in Winslow and rethinking the design of the island's rural roads.

Geological changes and adaptation

The island is a dynamic geological environment, and those areas subject to the greatest degree of change may warrant special attention as development pressures turn the focus on available land.

Climate change and adaptation

The island already is witnessing the impacts of sea level rise and storm severity, and the existing land use, capital facilities, and environmental policies may not adequately explore or voice the City's strategic response – either to harden and make more resilient or to adapt and allow for a managed retreat from areas most impacted.

Managing land and resource consumption

Incremental farmland conversion, deforestation, and the expansion of Winslow's sewer service area to accommodate growth are popular and divisive topics. But one underlying assumption is that development in and around Winslow will continue as it has, with a bias toward single family housing and a conflict-rich response to proposing anything else. An island-wide perspective valuing open space, farmland, habitat, and groundwater conservation may shape this conversation, causing a revisiting of land policy sensitive to the rate at which land is consumed to accommodate population and economic growth.

Governance: Consistency and credibility

The level of trust and faith the community has in government in general, and City government specifically, varies. This process has an opportunity to enhance local government credibility and propose initiatives within the local community's ability and capacity, building confidence and effectiveness.

Aging and institutional response

The school district is the institution most impacted today, but others may follow as the community's demographic ages and it becomes increasingly difficult for younger adults and families to prosper on the island.

Engagement representation

There are vocal participants in Bainbridge Island's affairs, many of whom represent empowered minorities. Effective outreach and an accessible process can encourage other voices to engage, increasing and broadening the community's policy perspective.