



# City of Richmond

## Report to Committee

**To:** General Purposes Committee

**Date:** March 24, 2025

**From:** John Hopkins  
Director, Policy Planning

**File:** 08-4045-30-01/Vol 01

**Re:** Official Community Plan Targeted Update – Proposed Update to the Environmentally Sensitive Areas (ESA) Map

### Staff Recommendations

1. That the report entitled “Official Community Plan Targeted Update – Proposed Update to the Environmentally Sensitive Areas (ESA) Map” dated March 24, 2025, from the Director, Policy Planning, be received for information; and
2. That the draft Environmentally Sensitive Maps which are included in the report entitled “Official Community Plan Targeted Update – Proposed Update to the Environmentally Sensitive Areas (ESA) Map” dated March 24, 2025, from the Director, Policy Planning, be endorsed for public and stakeholder consultation as part of the Official Community Plan targeted update.

John Hopkins  
Director, Policy Planning  
(604-276-4279)

JH:rn  
Att. 4

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Engineering	<input checked="" type="checkbox"/>	
Climate & Environment	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

This report provides an update on the revised mapping for Richmond's Environmentally Sensitive Areas (ESAs) for Council consideration and seeks endorsement to proceed with public and stakeholder consultation this spring 2025 as part of the Official Community Plan (OCP) targeted update.

This report supports Council's Strategic Plan 2022-2026 Strategy #2 Strategic and Sustainable Community Growth:

*2.3 Ensure that both built and natural infrastructure supports sustainable development throughout the city.*

This report supports Council's Strategic Plan 2002-2026 Strategy #5 A Leader in Environmental Sustainability:

*5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.*

*5.2 Support the preservation and enhancement of Richmond's natural environment.*

This report supports Council's Strategic Plan 2022-2026 Strategy #6 A Vibrant, Resilient and Active Community:

*6.2 Enhance the City's network of parks, trails and open spaces.*

### Background

The Official Community Plan (OCP) targeted update will help chart a renewed course for the future of the City of Richmond and will influence the way the community grows by guiding decisions on long-term land use planning and urban design with the purpose of strengthening the city's structure, form and function. The targeted updates aim to improve the existing OCP and invigorate Richmond's land use blueprint for the future.

### OCP Targeted Update Scope of Work

To support and facilitate the aspiration of becoming a more complete community, the OCP targeted update focuses on a strategic and measured approach to preparing the community for the challenges and opportunities facing Richmond today and into the future. The newly revised OCP will be grounded in Council's Strategic Directions and will respond to the new provincial legislation on housing policy. In 2022, Council approved a plan to update the OCP with themes of "Resiliency, Equity, Adaptation and Completeness" and six targeted areas including:

1. Housing Affordability;
2. Equity;
3. Environmental Protection and Enhancement;

4. Climate Mitigation and Adaptation;
5. Long-Term Planning for Emerging Trends and Transformational Technologies; and
6. Administrative Updates.

At the time, Council endorsed the scope for a robust review of the existing OCP to strengthen its policies in areas such as affordable housing, equitable communities from a land-use perspective and environmental resilience. However, the process was interrupted by new provincial legislation (Bills 16, 44, 46 and 47) that altered the planning framework in British Columbia, requiring an extended pause to integrate these changes into local planning practices. This review must now address provincial deadlines such as the requirement to update the OCP by the end of 2025 and incorporating housing policies as they relate to Small-Scale Multi-Unit Housing (SSMUH) and Transit-Oriented Areas (TOA). Richmond's OCP targeted update, from the perspective of public consultation, was relaunched in September 2024, starting with phase one of community engagement.

On September 9, 2024, Council endorsed a public engagement framework for the OCP targeted update, which was divided into three consultation phases:

1. Background Research & Public Engagement (September 2024 to February 2025);
2. Strategic Options (February 2025 to June 2025); and
3. Pulling the Plan Together (July 2025 to December 2025).

This staff report presents for Council's information and feedback, a proposed update to the ESA maps, which is part of the work tasks and deliverables associated with Target Area #3: Environment Protection & Enhancement of the OCP targeted update project.

### **Analysis**

One of the key directives of the OCP targeted update was to prepare an update to the City's ESA map – Attachment 1 to the existing OCP – using a landscape ecology, science-based approach. This update should contribute to improving and further advancing the policy framework for the conservation and enhancement of natural areas, including ESAs, as directed and endorsed by Council.

### **Legal Framework for Environmentally Sensitive Areas**

Under the *Local Government Act* (LGA), an OCP must include statements and map designations for the area covered by the plan that would include policies on the use of land that is environmentally sensitive to development. Further, the LGA indicates that Council, in an OCP, may include policies relating to the preservation, protection, restoration and enhancement of the natural environment, its ecosystems and biological diversity (e.g., ESAs).

The LGA further states that Council may designate a Development Permit Area (DPA) for the protection of the natural environment, its ecosystems and biological diversity. It may also list exemptions from, or qualifications to the DPA requirements.

On lands within the Province's Agricultural Land Reserve (ALR), the *Farm Practices Protection (Right to Farm) Act* has greater authority than the measures granted to the City by the LGA, such as ESAs, in matters related to farm operations and land use regulations.<sup>1</sup> Other initiatives by federal, provincial, and regional governments and agencies contribute to ESA management, such as fish habitat protection by the Department of Fisheries and Oceans (DFO), and the protection of Sturgeon Bank and South Arm Marshes as a provincial Wildlife Management Area since 1998.

Richmond first designated ESAs occurred in 1991, in which the City designated all ESAs as a DPA by which development is regulated through a review and permitting process intended to ensure appropriate assessment and evaluation of these ESA resources. The ESA mapping was updated in 1999 and again in 2012 (current version) as part of an OCP review (Attachment 1). The vast majority of ESA lands in Richmond are along the shoreline of the Fraser River or within the Provincial Agricultural Land Reserve (ALR). The ESA lands connect through wildlife corridors associated with the City's Riparian Management Area network (e.g., designated streams, drainage canals that provide nutrients to fish bearing waters). The ESA areas are significant sites and hubs within the City's Ecological Network (EN) which categorizes Richmond's natural and semi-natural areas<sup>2</sup>, including terrestrial, shoreline and riparian zones.

ESA designated lands are identified in the OCP as containing tangible ecological features (e.g., vegetation, woodlots, waterways, ditches, wetlands) which contribute to the long-term maintenance of biological diversity, soil health, water quality or other natural resources both on the site and in a broader municipal and regional context. The aim of the designation is to manage any potential negative ecological impacts from development and other types of alterations within the ESA designated lands. The ESA mapping provides an indication that there are environmental attributes that are important to conserve and/or enhance. In essence, the ESA designation map is an 'early alert mechanism' to guide consideration of tangible ecological features in concert with development site planning.

ESA mapping, similar to a land use overlay, are not intended to lessen development potential that is provided by the underlying OCP land use designation and associated zoning, but rather, indicate that there are environmental attributes that are important to facilitate a solution.

Through the identification of ESAs, the Development Permit process allows a detailed assessment and inventory of the environmental attributes on the site through the hiring of a Qualified Environmental Professional (QEP) in consultation with City staff. The detailed assessment and inventory by the QEP includes the identification of opportunities to retain and/or enhance the environmental features, and is followed by conditions that can be used through the issuance of a Development Permit to ensure that any development proposal demonstrates good environmental stewardship for those properties located within an ESA. The current policy framework exempts farming activities from having to secure an ESA Development Permit due to

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<sup>1</sup> **Part 2** Right to Farm: Section 2.2.c) . . . *the farm operation must not be conducted in contravention of the Public Health Act, Integrated Pest Management Act, Environmental Management Act, Water Sustainability Act, Fisheries Act, and the regulations under those Acts.*

<sup>2</sup> NATURAL AREAS are spaces of land, water or geological features which have occurred naturally and have been naturally colonized by flora and fauna. SEMI-NATURAL AREAS are spaces of land, water or geological features which have most of its processes and biodiversity intact, though altered by human activity in strength or abundance (through restoration + enhancement efforts) relative to the natural state.

Provincial legislation. However, the policy framework does require a farm plan submission to ensure that any proposed farming operation is legitimate through an ESA exemption process (e.g., submission of a farm plan). Residential and non-farming related development activities on an agricultural property are subject to ESA and other environmental requirements.

#### Richmond's Current Natural Areas Conservation Land Use Planning Framework

ESAs are an important part of Richmond's multifaceted natural areas conservation approach to land use planning, which also includes, among others, the current 'Conservation Area' land use designation on the City of Richmond 2041 OCP Land Use Map, Richmond's Riparian Management Areas (RMAs) policies and the Ecological Network Management Strategy (EN). The Conservation Area land use designation is applied to multiple natural and semi-natural areas of the City with important environmental values whose protection has been secured by federal, provincial or municipal ownership or legal conservation designation and by a long-term policy commitment by a senior level of government.

The RMA land use policies, similar to the ESA policies, identify riparian areas – productive ecosystems where terrestrial and aquatic environs meet – add a further important contribution to Richmond's ecological system and biodiversity. These vegetated corridor spaces help stabilize banks, improves water quality and temperature, contributes nutrients to aquatic environs and provides habitat. Furthermore, the EN weaves a more comprehensive ecological tapestry by tethering the Conservation Area land use designation, the ESAs and the RMAs as the foundational environmental land use planning features, as well as providing initial guidance for conserving various other spaces that provide ecological and biodiversity values at a variety of spatial scales.

#### ESA Map Development

As part of the work related to the ESA mapping, the City retained a consultant (Diamond Head Consulting) to work collaboratively with staff in order to provide an updated ESA Map for the OCP. Work was undertaken through a series of on-site field investigations coupled with the employment of new mapping technology and analysis techniques (namely, the usage of laser imaging, detection and ranging [LiDAR], geographic information systems [GIS] and satellite imagery, and cross-referencing previous mapping).

#### Mapping Update Research, Recommendations and Rationale

An updated mapping and associated spatial data for ESAs was prepared, which included recommended updates to the ESA Map (Attachment 2). Attachment 3 indicates areas that have been added to the ESA mapping whereas Attachment 4 indicates areas that have been removed from the ESA mapping.

Some of the key highlights include:

1. The total assessed ESA inventory is 3,190 ha (an increase from the 2012 assessed total area of 1,396 ha);

2. The updated ESA Map reflects revisions to ESA boundaries in response to previously approved ESA development permits or areas that are currently being used for agricultural production in the ALR.
3. The following areas, including a number of City-owned lots and land, have been added as ESAs, and thus represented on the ESA Map, including:
  - a) Richmond Nature Park;
  - b) Bog areas of the Garden City Lands; and
  - c) Recreational corridors such as the Bridgeport, Shell and Railway trail.

Adding the aforementioned sites to the ESA inventory is recommended due to the ecological assessment of these sites, which confirmed that they exhibit the ecological functions and traits that are normally associated with ESAs, including the presence of wildlife, functioning as a wildlife corridor, and/or being comprised of native vegetation. As such, these sites were ranked as suitable candidates for inclusion in the City’s ESA inventory.

The majority of the added ESA sites are located within the Sea Island Conservation Area, Sturgeon Banks, and South Arm Islands which are also regulated under Provincial and/or Federal jurisdiction. This also includes the extension of the City’s foreshore which is also within Provincial and/or Federal jurisdiction. The City would coordinate the environmental review through the ESA Development Permit.

Two of the added sites are municipal-owned parks, including the Richmond Nature Park and the bog area of the Garden City Lands, that are programmed, managed, and maintained by the City. These City-owned sites are noteworthy environmental or nature spaces that are valued by the community.

The areas that are not included in the revised ESA mapping are primarily areas that have received an ESA farming exemption and are currently being farmed.

With the professional assistance and guidance by the consultant, who incorporated arborists, biologists and cartographers employed up-to-date and best practices, a new reclassification system has been identified for Richmond’s ESAs, from the current five (5) to four (4) categories/types of ESA designated lands. Table 1 below identifies each new ESA class proposed along with its corresponding existing class. It also notes the new ESA Class of Disturbed Freshwater Influenced which was not previously included in the OCP ESA Map.

*Table 1: Existing and Proposed ESA Categories*

Existing ESA Category	Proposed ESA Category Consolidated
1. Intertidal	1. Marine
2. Shoreline	
3. Upland Forest	2. Terrestrial
4. Old Field and Shrublands	
5. Freshwater Wetland	3. Natural Freshwater Influenced
	4. Disturbed Freshwater Influenced (New)

The following rationale for the proposed reclassification of the City's ESA is as follows:

1. The reclassification simplifies and clarifies the categorization of the City's ESA inventory;
2. The reclassification takes into account the fact that some of the existing ESA categories have overarching ecological similarities and functions and, therefore, can be grouped in the same category in the future to account for these similarities; and
3. The proposed category of "Disturbed Freshwater Influenced" captures ESAs on agricultural fields that are subject to provincial regulations under the ALR designation. The proposed category also helps to better manage ESAs on these farmlands in relation to identifying existing ecological features, but also taking into account the City's Farm First Strategy and the provincial *Right to Farm Act*.

#### Emerging Objectives for Updated ESA Development Permit Policy

ESAs help to create a thriving, sustainable community by protecting and restoring nature, supporting biodiversity, improving ecosystem resilience, and storing carbon to promote well-being and carbon neutrality. The emerging ESA development permit objectives for ESAs include:

- ✓ Maintain, restore and enhance Richmond's natural islands setting, ecological systems and visual assets as a part of a rich natural heritage for the benefit of present and future generations;
- ✓ Support and enhance biological diversity through nature patches, corridors and spaces throughout the landscape;
- ✓ Integrate ecological systems and processes into municipal environs;
- ✓ Assess conservation values and environment priorities equally with land infrastructure development;
- ✓ Conserve, restore and enhance aquatic and terrestrial spaces; and
- ✓ Manage the introduction and spread of invasive species.

#### Next Steps

A companion report will be presented to Council in the coming weeks on the proposed strategic policy directions for the main target area of the OCP update – specifically:

- 1) housing affordability,
- 2) equity,
- 3) environmental protection & enhancement, and
- 4) climate mitigation & adaptation.

Once Council endorses the strategic policy directions, along with Council endorsement of the draft ESA mapping as part of this report, staff intend to conduct public and stakeholder consultation later in the spring (Phase 2 of the OCP consultation plan). The ESA mapping will also be presented to the Advisory Committee on the Environment (ACE) for further feedback. An earlier version of the ESA mapping was brought forward to ACE for comment in 2024.

The results of the spring consultation will be reflected in the draft updated OCP, which will include the revised ESA mapping, along with updated policies that refine and streamline the review of ESA DP applications, and forward this to Council for consideration in the fall of 2025. A public hearing would follow as per legislative requirements. This will provide opportunities for Council and members of the public to provide feedback on the ESA mapping and OCP review.

**Financial Impact**

None.

**Conclusion**

This report presents an update to the City of Richmond's ESA map as part of the OCP targeted update project. This specific work task and deliverable is associated with Target Area #3: Environment Protection & Enhancement of the OCP targeted update project. One of the key directives of Council to staff was to prepare an update to the City's ESA map using a landscape ecology, science-based approach. The intent of this update ESA map is to contribute to improving and further advancing the policy framework for the protection and enhancement of natural areas. It is recommended that Council receive this report for information and endorse the proposed ESA mapping for public and stakeholder consultation as part of the OCP targeted update.



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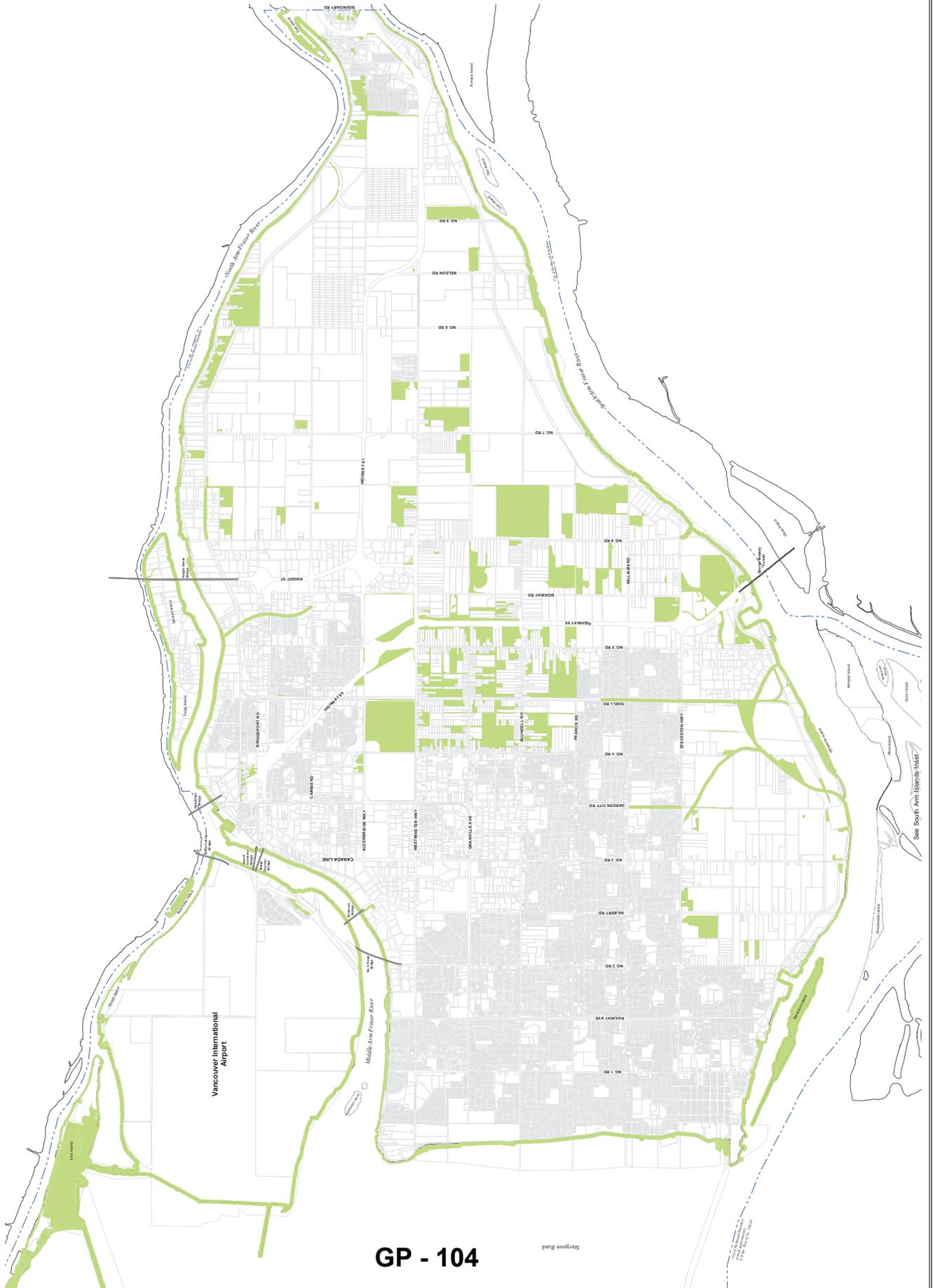
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- Att. 1: Existing ESA Map (2012)
- Att. 2: Proposed ESA Map (2025)
- Att. 3: Areas that have been added to the ESA Map (comparison between 2012 and 2025)
- Att. 4: Areas that have been removed from the ESA Map (comparison between 2012 and 2025)

# Existing ESA Map (2012)



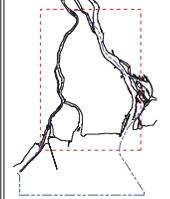
**Legend**  
Environmentally Sensitive Areas (ESA)



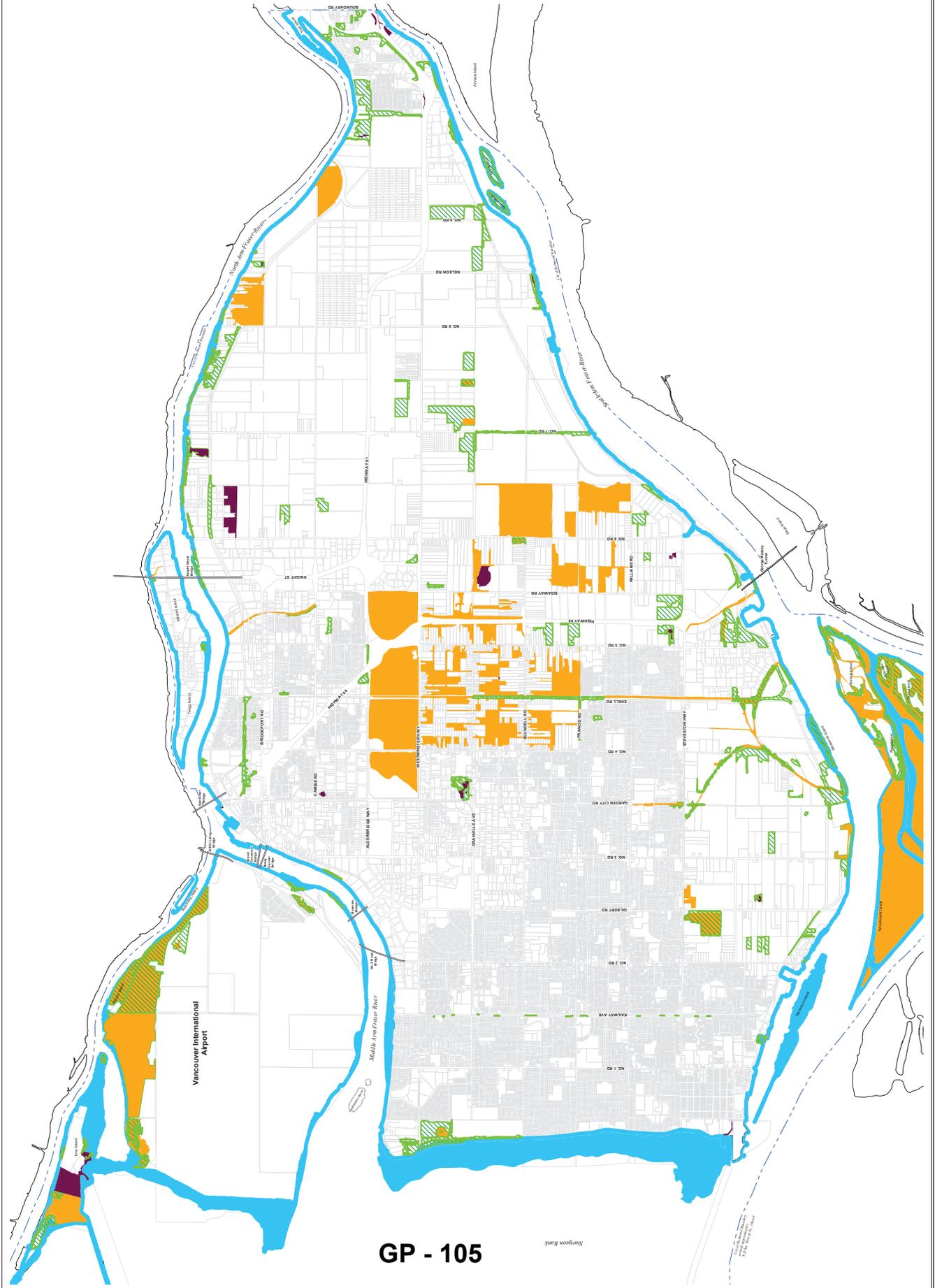
GP - 104

March 12, 2025  
Prepared by Urban Planner

Notes:  
1. This map is a representation of the existing Environmental Sensitive Areas (ESA) in the City of Richmond. It is not intended to be used for any other purpose.  
2. The City of Richmond is not responsible for the accuracy or completeness of the information shown on this map.  
3. The City of Richmond is not responsible for any errors or omissions on this map.  
4. The City of Richmond is not responsible for any damages or liabilities arising from the use of this map.  
5. The City of Richmond is not responsible for any legal actions arising from the use of this map.



# Proposed ESA Map (2025)



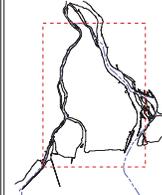
**Legend**

**ESA Type**

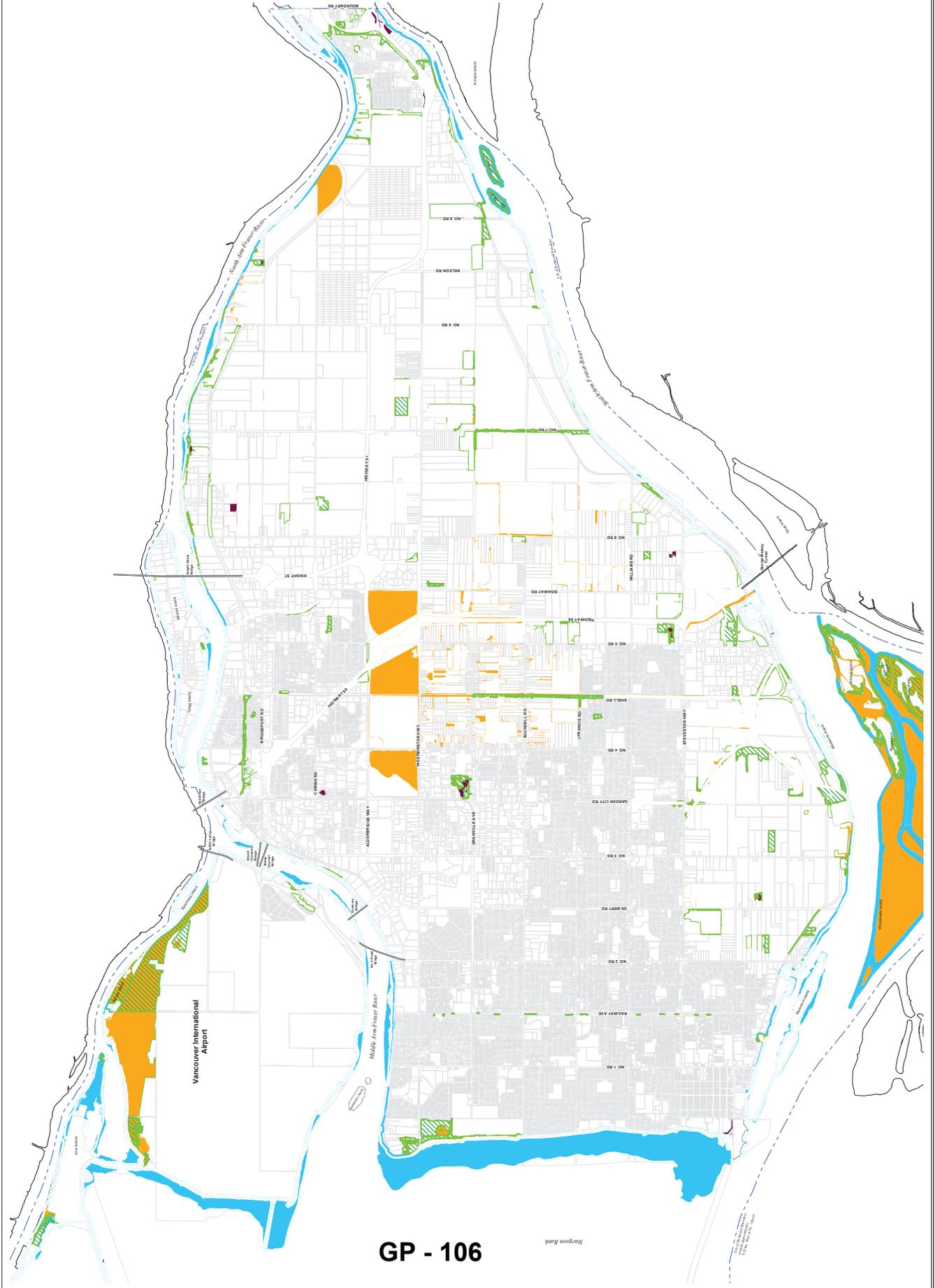
- Terrestrial
- Disturbed Freshwater Influenced
- Natural Freshwater Influenced
- Marine

March 18, 2025  
Prepared by: Oshor Butler

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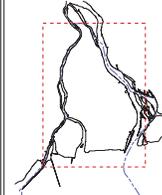
GP - 105



**Legend**  
**ESA Type**  
 Terrestrial  
 Disturbed Freshwater Influenced  
 Natural Freshwater Influenced  
 Marine

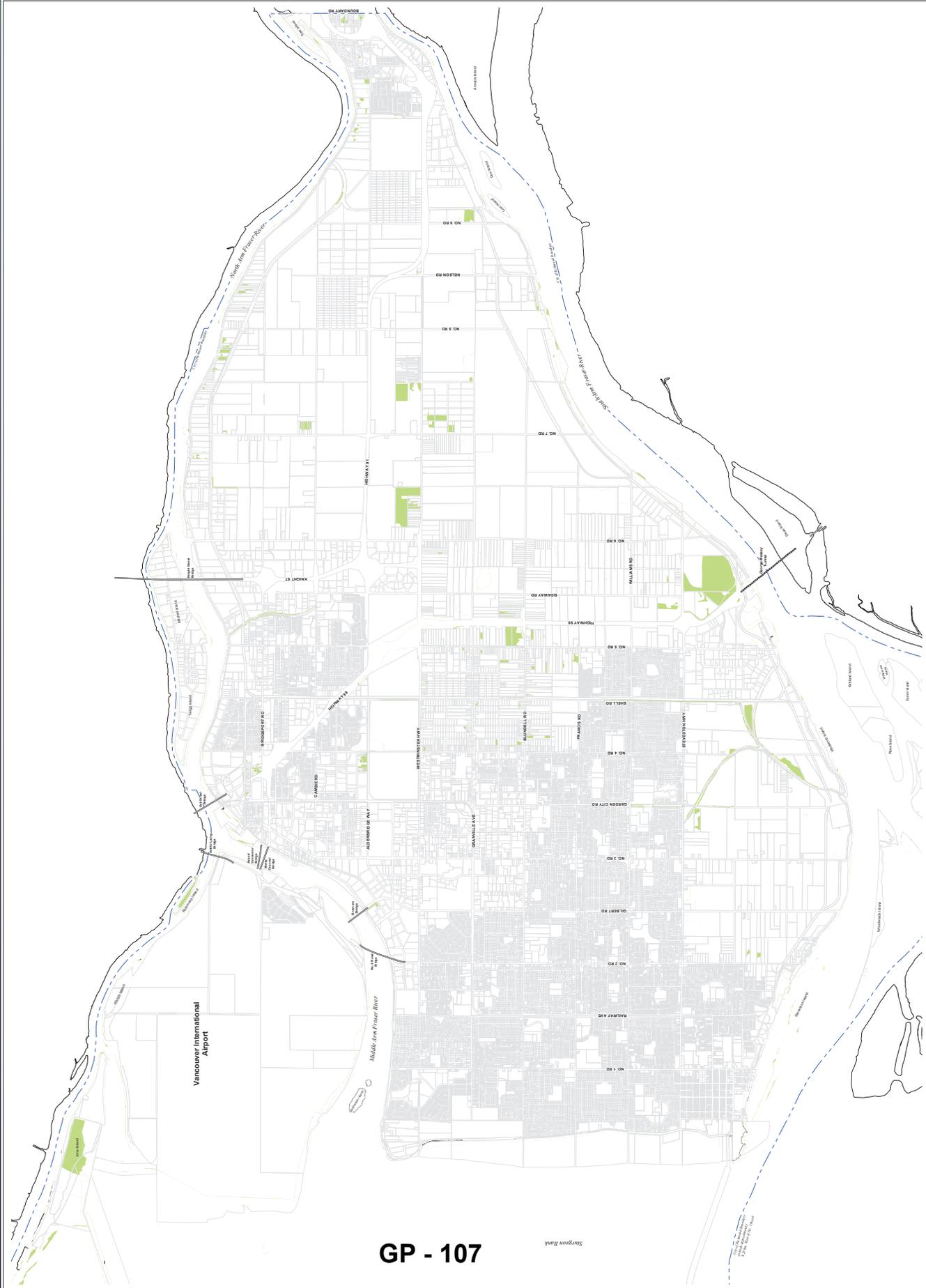
March 18, 2025  
 Prepared by Collier Clark

Notes:  
 1. This map is a summary of the Environmental Sensitivity Areas (ESA) identified in the City of Richmond's Environmental Sensitivity Assessment (ESA) Report. It is not intended to be used as a legal document or to make decisions about land use. The City of Richmond is not responsible for the accuracy or completeness of the information shown on this map. The City of Richmond is not liable for any damages or losses resulting from the use of this map. The City of Richmond is not responsible for any errors or omissions in this map. The City of Richmond is not responsible for any changes to the information shown on this map. The City of Richmond is not responsible for any updates to this map.



# Areas that have been removed from the ESA Map

Legend  
ESA Removed



GP - 107

March 18, 2025  
Prepared by Colleen Blum

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