

Washington Location Finder Use Case Summary

Shown in Package Hierarchy Order, Full Descriptions

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Description:	Exchange Network Funded Location Services

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1 WashingtonLocationFinder

A-WLF1 Ecology Data Editor

Ecology staff using role-based security to access a web application for location insert, update, or delete

Goals
Insert location
update location
delete location

Use cases that this actor plays a role in:

- Determine Location By Map Interface (UC-WLF3)
- Display GeoCoded Address (UC-WLF2)
- Identify GIS Features Within Search Radius (UC-WLF8)
- Identify Receiving Water Near Outfall (UC-WLF7)
- Intersect Location GIS Layers (UC-WLF6)
- Locate By Street Address (UC-WLF1)
- Update Location By Map Interface (UC-WLF5)
- Verify Location By Map Interface (UC-WLF4)
- Zoom Map To Location (UC-WLF9)

A-WLF2 Ecology Data Reader

Ecology authenticated domain user with read access to web applications.

Goals
Read location

Use cases that this actor plays a role in:

- Identify GIS Features Within Search Radius (UC-WLF8)
- Identify Receiving Water Near Outfall (UC-WLF7)
- Intersect Location GIS Layers (UC-WLF6)
- Locate By Street Address (UC-WLF1)
- Zoom Map To Location (UC-WLF9)

A-WLF3 Public Data Editor

A external user accessing an Ecology system via Secure Access Washington to insert, update, and/or delete a location using an Ecology web application

Goals
Insert New Location
Update Existing Location
Delete Existing Location

Use cases that this actor plays a role in:

- Determine Location By Map Interface (UC-WLF3)
- Display GeoCoded Address (UC-WLF2)
- Identify GIS Features Within Search Radius (UC-WLF8)
- Identify Receiving Water Near Outfall (UC-WLF7)
- Intersect Location GIS Layers (UC-WLF6)
- Locate By Street Address (UC-WLF1)
- Update Location By Map Interface (UC-WLF5)
- Verify Location By Map Interface (UC-WLF4)
- Zoom Map To Location (UC-WLF9)

A-WLF4 Public Data Reader

A public user accessing these GIS services in a read-only mode. For query and display but not edit

Use cases that this actor plays a role in:

- Identify GIS Features Within Search Radius (UC-WLF8)
- Identify Receiving Water Near Outfall (UC-WLF7)
- Intersect Location GIS Layers (UC-WLF6)
- Locate By Street Address (UC-WLF1)
- Zoom Map To Location (UC-WLF9)

A-WLF5 GIS Service Administrator

A GIS technical staff member responsible for maintaining the GIS services being accessed by the Washington Location Finder applications

Use cases that this actor plays a role in:

- Determine Location By Map Interface (UC-WLF3)
- Display GeoCoded Address (UC-WLF2)
- Identify GIS Features Within Search Radius (UC-WLF8)
- Identify Receiving Water Near Outfall (UC-WLF7)
- Intersect Location GIS Layers (UC-WLF6)
- Locate By Street Address (UC-WLF1)
- Update Location By Map Interface (UC-WLF5)
- Verify Location By Map Interface (UC-WLF4)
- Zoom Map To Location (UC-WLF9)

UC-WLF1 Locate By Street Address

P1

Display and/or Capture location based on Street Address

Details

Parent: WashingtonLocationFinder

Primary Actors: Ecology Data Editor, Ecology Data Reader, Public Data Editor, Public Data Reader

Supporting Actors: GIS Service Administrator

<p>Preconditions: User logged into applicaiton user provides address location address services are operational Level: User Use Case Status: Complete Assigned To: Craig (DOH)</p>	<p>Success Guarantee: Complexity: High Implementation Status: Complete Release:</p>
Flow of Events	
<p>Main Success Scenario:</p> <ol style="list-style-type: none"> 1. user supplies street address 2. address is submitted to address correction and standardization web service. 3. standardized address is submitted to an address geocoding service 4. a location x,y coordinates, and metadata are returned <p>Extensions:</p>	

UC-WLF2 Display GeoCoded Address

P1

The X,Y coordinate location of a geo-coded location are displayed within an interactive map with sufficient reference base layers displayed

Details		
<p>Parent: WashingtonLocationFinder Primary Actors: Ecology Data Editor, Public Data Editor Supporting Actors: GIS Service Administrator Preconditions: User logged in user accessing the map interface user has provided an address to view geocoding of the address returned a valid XY Success Guarantee:</p>		
<p>Level: User Use Case Status: Complete Assigned To: Ewan Complexity: Medium Implementation Status: Complete Release:</p>		
Flow of Events		
<p>Main Success Scenario:</p> <ol style="list-style-type: none"> 1. Successful XY location and metadata from Geocoding service 2. Display the XY location on an interactive map page 3. Zoom the map to be centered on the XY location 4. Provide map navigation tools to allow user to pan, zoom, change layer <p>Extensions:</p>		
Referenced Requirements	Type	ID
Map Performance	Performance	REQ-WLF1
Provide Best Available GIS Data	Non-functional	REQ-WLF5

UC-WLF3 Determine Location By Map Interface

P1

A location is specified by using an interactive map interface to pan, zoom, and otherwise navigate to the area of interest, then define a point, line, or polygon location on the map display.

Details		
Parent: WashingtonLocationFinder		
Primary Actors: Ecology Data Editor, Public Data Editor		Supporting Actors: GIS Service Administrator
Preconditions: User Logged in with an edit role user is accessing the map interface the user can find the location of interest		Success Guarantee:
Level: User	Complexity: High	
Use Case Status: Complete	Implementation Status: Complete	
Assigned To: Ewan	Release:	
Flow of Events		
Main Success Scenario:		
<ol style="list-style-type: none"> 1. User accesses an interactive map interface 2. the user zooms to an area of interest based on a set of zoom-to-feature, or interactive pan and zoom tools 3. the user selects the type of feature to be entered (point, line, polygon) 4. the user draws the features on the map interface using a mouse-activated cursor. 5. the user dismisses the edit by completing, or cancelling 		
Extensions:		
Referenced Requirements	Type	ID
Improve Map Functions for Docket System	Functional	REQ-WLF6
Map Performance	Performance	REQ-WLF1
Provide Best Available GIS Data	Non-functional	REQ-WLF5
Water Quality Requirements	Functional	REQ-WLF8

UC-WLF4 Verify Location By Map Interface

P1

The user confirms the validity of a location

Details		
Parent: WashingtonLocationFinder		
Primary Actors: Ecology Data Editor, Public Data Editor		Supporting Actors: GIS Service Administrator
Preconditions: User logged in User is accessing the web map interface The location of interest is selected, zoomed, and displayed		Success Guarantee:
Level: User	Complexity: High	
Use Case Status: Complete	Implementation Status: Complete	
Assigned To: Ewan	Release:	

Flow of Events		
Main Success Scenario:		
<ol style="list-style-type: none"> 1. a location is entered by tabular means (latitude, longitude, street address) 2. the location is resolved to an XY coordinate pair 3. the location is displayed in an interactive map interface 4. additional reference base map layers are presented to allow the user to verify the location 5. the user accepts the location, or rejects the location and updates the location by map interaction (UC-WLF5) 		
Extensions:		
Referenced Requirements	Type	ID
Automate Metadata	Functional	REQ-WLF4
Improve Map Functions for Docket System	Functional	REQ-WLF6
Map Performance	Performance	REQ-WLF1
Provide Best Available GIS Data	Non-functional	REQ-WLF5
Water Quality Requirements	Functional	REQ-WLF8

UC-WLF5 Update Location By Map Interface

P1

User update the location by first viewing the location, then entering a new location via interaction with the map interface

Details	
<p>Parent: WashingtonLocationFinder</p> <p>Primary Actors: Ecology Data Editor, Public Data Editor</p> <p>Preconditions: User logged in User is accessing the web map interface User has selected the location in question</p> <p>Level: User</p> <p>Use Case Status: Complete</p> <p>Assigned To: Ewan</p>	<p>Supporting Actors: GIS Service Administrator</p> <p>Success Guarantee:</p> <p>Complexity: High</p> <p>Implementation Status: Complete</p> <p>Release:</p>
Flow of Events	
Main Success Scenario:	
<ol style="list-style-type: none"> 1. User accesses the map interface with the location in question displayed 2. User turns on additional data layers as needed to assist in verification of the location 3. User selects update tool/function from the map tools 4. User positions the map cursor at the updated location using the mouse navigation and draws the new location. 5. User completes the drawing 6. User accepts the new location 	
Extensions:	

Referenced Requirements	Type	ID
Automate Metadata	Functional	REQ-WLF4
Improve Map Functions for Docket System	Functional	REQ-WLF6
Map Performance	Performance	REQ-WLF1
Provide Best Available GIS Data	Non-functional	REQ-WLF5
Water Quality Requirements	Functional	REQ-WLF8

UC-WLF6 Intersect Location GIS Layers

P1

Information about a given location is returned for the GIS layers specified in the requests

Details		
Parent: WashingtonLocationFinder Primary Actors: Ecology Data Editor, Ecology Data Reader, Public Data Editor, Public Data Reader Preconditions: User logged into client system GeoProcessing service is available Level: Summary Use Case Status: Complete Assigned To: Ewan		
Supporting Actors: GIS Service Administrator Success Guarantee: Complexity: High Implementation Status: Complete Release:		
Flow of Events		
Main Success Scenario: <ol style="list-style-type: none"> 1. User selects GIS data layers of interest (or these layers are predefined by the business application) 2. A location is submitted to a GIS service (the location can be specified interactively using UC-WLF3) 3. Information is returned for each feature intersected by the request location. 		
Extensions:		
Referenced Requirements	Type	ID
Identify Adjacent Parcels Owners	Functional	REQ-WLF3
Water Quality Requirements	Functional	REQ-WLF8

UC-WLF7 Identify Receiving Water Near Outfall

P1

This is specific implementation of the more generic UC-WLF8

Details		
Parent: WashingtonLocationFinder Primary Actors: Ecology Data Editor, Ecology Data Reader, Public Data Editor, Public Data Reader Preconditions: Level: Use Case Status:		
Supporting Actors: GIS Service Administrator Success Guarantee: Complexity: Implementation Status:		

Assigned To: Ewan	Release:
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UC-WLF8 Identify GIS Features Within Search Radius	P1
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Find information within a search radius of a location.

Details	
Parent: WashingtonLocationFinder	
Primary Actors: Ecology Data Editor, Ecology Data Reader, Public Data Editor, Public Data Reader	Supporting Actors: GIS Service Administrator
Preconditions: user logged in method to specify location is provided	Success Guarantee:
Level: Summary	Complexity: High
Use Case Status: Complete	Implementation Status: Complete
Assigned To: Ewan	Release:
Flow of Events	
Main Success Scenario:	
<ol style="list-style-type: none"> 1. User selects a set of information of interest 2. User specifies a location (can be done with Map interface as defined in UC-WLF3) 3. Location is submitted to an intersection geoprocessing service which accepts a search radius 4. the intersected information is returned 	
Extensions:	

UC-WLF9 Zoom Map To Location	P1
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User specifies a location to zoom the map to.

Details	
Parent: WashingtonLocationFinder	
Primary Actors: Ecology Data Editor, Ecology Data Reader, Public Data Editor, Public Data Reader	Supporting Actors: GIS Service Administrator
Preconditions: User logged in User is using web-based map interface User is able to select zoom function	Success Guarantee:
Level: User	Complexity: Medium
Use Case Status: Complete	Implementation Status: Complete
Assigned To: Ewan	Release:
Flow of Events	
Main Success Scenario:	
<ol style="list-style-type: none"> 1. User select a method of zooming (Latitude-Longitude, Township-Range-Section, City, County, WRIA, etc) 2. User specifies a value appropriate for the method of zooming (County = Thurston) 3. Map zooms to the selected feature, and is scaled to display the feature in it's 	

Flow of Events
entirety.
Extensions:

REQ-WLF1 Map Performance

P1

The map services must return a map within a few seconds, similar to the user's expectation from Google & Microsoft map services

Details	
Parent: WashingtonLocationFinder	Status: Approved
Type: Performance	Release:
Assigned To: Ewan	
Source:	
Notes	Date Added
REST interface provided the performance expected	8/9/2010
Use cases that reference this requirement	
Determine Location By Map Interface	UC-WLF3
Display GeoCoded Address	UC-WLF2
Update Location By Map Interface	UC-WLF5
Verify Location By Map Interface	UC-WLF4

REQ-WLF3 Identify Adjacent Parcels Owners

P1

Identify parcels adjacent to a target parcel and return contact information for notification

Details		
Parent: WashingtonLocationFinder		
Type: Functional		
Status: Implemented		
Assigned To: Ewan		
Release:		
Source:		
Open Issues	Assigned To	Resolve By
Ecology does not permission to provide Parcel attribute information to outside parties -- being managed by service level agreements.		
Use cases that reference this requirement		
Intersect Location GIS Layers		UC-WLF6

REQ-WLF5 Provide Best Available GIS Data

P1

Display the best available Hydrography, River Names, Transportation, USGS Quads, and Otherophotography within the Web Map applicaiton

Details	
Parent: WashingtonLocationFinder	
Type: Non-functional	
Status:	
Assigned To:	
Release:	
Source:	
Related Documents	

Related Documents	
http://www.ecy.wa.gov/services/gis/projects/geojarpa/WashingtonLocationServices/Requirements/EcologyRequirements.doc	
Use cases that reference this requirement	
Determine Location By Map Interface	UC-WLF3
Display GeoCoded Address	UC-WLF2
Update Location By Map Interface	UC-WLF5
Verify Location By Map Interface	UC-WLF4

REQ-WLF4 Automate Metadata

P1

Automate the capture of mandatory metadata (datum, method, accuracy, source scale, reference source)

Details		
Parent: WashingtonLocationFinder		
Type: Functional		Status: Approved
Assigned To: Ewan		Release:
Source:		
Open Issues	Assigned To	Resolve By
Automation only works if use selected location from the map interface		
Related Documents		
http://www.ecy.wa.gov/services/gis/projects/geojarpa/WashingtonLocationServices/Requirements/EcologyRequirements.doc		
Use cases that reference this requirement		
Update Location By Map Interface		UC-WLF5
Verify Location By Map Interface		UC-WLF4

REQ-WLF6 Improve Map Functions for Docket System

P1

Improve map clarity, add zoom to function for Lat-Long, city, county, mile post, marinas and docks. Improved data for ports and marinas, rural road name,

Details		
Parent: WashingtonLocationFinder		
Type: Functional		Status: Approved
Assigned To: Ewan		Release:
Source:		
Open Issues	Assigned To	Resolve By
rural road limited by data		
ports and docks can be displayed but don't have reliable source for names		
Related Documents		
http://www.ecy.wa.gov/services/gis/projects/geojarpa/WashingtonLocationServices/Requirements/EcologyRequirements.doc		
Use cases that reference this requirement		
Determine Location By Map Interface		UC-WLF3
Update Location By Map Interface		UC-WLF5

Use cases that reference this requirement	
Verify Location By Map Interface	UC-WLF4

REQ-WLF7 WA Dept Fish Wildlife

P1

Must support Latitude-Longitude WGS84, Stream Catalog, driving directions, relation to ordinary high water, tributary to, line and polygon features

Details		
Parent: WashingtonLocationFinder		
Type: Functional		Status: Approved
Assigned To: Ewan		Release:
Source:		
Open Issues	Assigned To	Resolve By
Do not have a reliable source for Stream Catalog		
Driving instructions out of scope		
Ordinary high water data not available in statewide data		
tributary to can be address by HUC catalog hierarchy		
Related Documents		
http://www.ecy.wa.gov/services/gis/projects/geojarpa/WashingtonLocationServices/Requirements/WaDFWRequirements.0.1.doc		

REQ-WLF8 Water Quality Requirements

P1

The following is the list of requirements from the Water Quality focus meeting:

- Waterbody name used to match Aquatic DB stream names
- Waterbody name used to confirm WQ Assessment listing
- Waterbody name used to reference permit application
- Must accommodate un-named streams
- Allow user to enter 'local name'
- Automatically fill in WRIA based on reported location
- Responsible agency should determine 303d listing, not applicant
- Application should filter parameter and media that apply for specific WQ Permit
- Search for permit within watershed, stream, jurisdiction
- need sufficient base map detail
- need to accommodate multiple ddischarge locations and footprint
- Report waterbody identify nearest surface water feature to allow confirmation
- What should WaDOT report, Latitude-Longitude, LLID, Measure?

Details	
Parent: WashingtonLocationFinder	
Type: Functional	
Assigned To: Ewan	
Source:	
Status: Approved	
Release:	
Notes	Date Added
Most of these requirements have been met by combining both the hosting application (Facility/Site, WebDMR, PARIS) and by the GIS	8/10/2010

Notes		Date Added
map component.		
Open Issues	Assigned To	Resolve By
JARPA has facility location only, not outfall		
Related Documents		
http://www.ecy.wa.gov/services/gis/projects/geojarpa/WashingtonLocationServices/BusinessRules/WLFWaterQualityBusinessRulesMeetingSummary03212007.pdf		
Use cases that reference this requirement		
Determine Location By Map Interface		UC-WLF3
Intersect Location GIS Layers		UC-WLF6
Update Location By Map Interface		UC-WLF5
Verify Location By Map Interface		UC-WLF4

Glossary

Term	Meaning	Aliases
GeoCoding	Within the Washington Location Finder Project Geocoding is defined as the process of finding a geographic XY coordinate pair (often expressed as latitude and longitude) from street addresses.	
GeoProcessing	a typical geoprocessing operation takes an input dataset, performs an operation on that dataset, and returns the result of the operation as an output dataset. Within the Washington Location Finder the term is typically used for the process of taking a location and intersection that location with GIS data layers and returning the information about that location as reported by the GIS layers	