

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

2016 Gypsy Moth Eradication Project- Nisqually, Thurston County, WA. This proposal is connected to a wider program to eradicate gypsy moth (European and Asian spp.) in King, Pierce, Thurston and Clark Counties.

2. Name of applicant:

3. Address and phone number of applicant and contact person:

*Rian Wojahn
3939 Cleveland Ave. SE
Olympia, WA 98501
(360) 664-8970*

4. Date checklist prepared:

February 5, 2016

5. Agency requesting checklist:

Washington State Department of Agriculture

6. Proposed timing or schedule (including phasing, if applicable):

Between April 15 and June 30, 2016

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes. The success of the project will be determined by the results of WSDA's summer gypsy moth trapping program. WSDA will install and monitor gypsy moth traps in the treatment area during the summers of 2016, 2017, and 2018.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The United States Department of Agriculture- Animal and Plant Health Inspection Service (USDA-APHIS), will prepare an Environmental Assessment (EA) which will be tiered to a Final Supplemental Environmental Impact Statement (FSEIS) prepared by the USDA-Forest Service and USDA-Animal and Plant Health Inspection Service entitled "Gypsy Moth Management in the United States: a cooperative approach, 2012" (FSEIS). Relevant sections of the FSEIS will be incorporated herein by reference. Copies of the EA and FSEIS will be available for review at the Washington State Library, 6880 Capitol Blvd. S, Tumwater, WA. Copies will also be available at nearby Thurston County Libraries. The USDA is taking part in Endangered Species Act Section 7 consultation with both the United States Department of Interior Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No

10. List any government approvals or permits that will be needed for your proposal, if known.

The above mentioned Environmental Assessment (EA) which will be tiered to the FSEIS.

WSDA will work with local governments to ensure compliance with all applicable local ordinances (Critical Areas Ordinance, etc.)

WSDA will consult with other agencies in order to implement appropriate mitigating measures with regard to Threatened or Endangered species and high quality ecosystems. The Endangered Species Act Section 7 consultations are also being conducted by USDA.

WSDA will be working under NPDES permit #WA0039047, issued by the Department of Ecology to the WSDA, for the purpose of invasive moth control. The permit, titled "Invasive Moth Control National Pollutant Discharge Elimination System Waste Discharge Permit", authorizes discharge of insecticides into surface waters of the state of Washington that are consistent with the terms and conditions of this permit for the purpose of invasive moth control.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

WSDA proposes to eradicate an infestation of gypsy moth in Thurston County, Washington by taking the following action:

Three to five aerial applications of the biological insecticide *Bacillus thuringiensis* var. *kurstaki* (Btk) (Foray 48B, EPA Reg. No. 73049-427) will be applied to all foliage (according to label) within an area of approximately 640 acres. The exact timing of the Btk applications will depend on the weather as well as larval and foliage development. Btk treatments would likely begin in late April or early May 2016.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Thurston County, Washington (S8/17/40/41, T18N, R1E). The site is approximately 1-mile south of Interstate 5 on the west side of the Nisqually River. Proposed boundaries: **See Attached Map**

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

(Circle one): **Flat**, rolling, hilly, steep slopes, and mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

10%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Does Not Apply

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Does Not Apply

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Does Not Apply

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Does Not Apply

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Does Not Apply

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Does Not Apply

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Helicopter or fixed wing airplane will apply Btk from a height of approximately 200-feet above tree tops. Btk droplets will not remain suspended for any measurable time.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Treatments will be limited to times when conditions do not promote prolonged droplet suspension.

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. Medicine Creek runs east/west through the proposed treatment area. Medicine Creek flows into McAllister Creek. The Nisqually River runs outside the proposed eastern boundary. The Nisqually River flows north until it reaches the Nisqually Wildlife Refuge (Nisqually Reach) and Puget Sound. Lost Lake is located outside of the proposed southern boundary.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. Host vegetation adjacent to the described water bodies will be treated with Btk. Any overhanging host vegetation will also be treated.

The Department of Ecology has issued the WSDA an NPDES permit (refer to Section A, item #10 of this SEPA checklist). The permit and fact sheet may be viewed on the Department of Ecology web site at www.ecy.wa.gov/programs/wq/pesticides/insect/index.html. WSDA and its contractors for this proposal will comply with all terms and conditions set forth in the NPDES permit.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Does Not Apply

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Water percolates into soil and runs throughout the water table.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

Possibly

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Due to the timing of applications and precision of aerial spray equipment, it is unlikely that any material would enter the water system. To maximize product efficacy and to minimize potential runoff, no applications (Btk) will be conducted when it is raining or when rain is in the immediate forecast.

4. Plants

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
 evergreen tree: fir, cedar, pine, other
 shrubs
 grass
 pasture
 crop or grain
 Orchards, vineyards or other permanent crops.
 wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
 water plants: water lily, eelgrass, milfoil, other
 other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

None

c. List threatened and endangered species known to be on or near the site.

A search of the Washington State Dept. of Natural Resources Natural Heritage Information System found no records for rare plants or high quality native ecosystems in the vicinity of this project. It is not anticipated that any threatened or endangered species will be affected by this proposal.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The gypsy moth feeds on more than 500 different species of trees and shrubs. Establishment of the gypsy moth in Washington state would seriously damage our environment, economy, and quality of life. WSDA's measures to eradicate gypsy moth will preserve native plants, landscaping, and other vegetation.

- e. List all noxious weeds and invasive species known to be on or near the site.

Does Not Apply

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, **eagle**, songbirds, **other**: various waterfowl
mammals: deer, bear, elk, beaver, other:
fish: bass, **salmon**, **trout**, herring, shellfish, other _____

- b. List any threatened and endangered species known to be on or near the site.

Western (Pacific) pond turtle, which is listed on the State endangered species list, is listed as occurring in the area. Steelhead Trout and Chinook Salmon, both Federally Threatened species, occur in the Nisqually River. Other fish found on or near the site include: Coho, Pink Salmon odd year, Doll Varden, Cutthroat, Resident Coastal Cutthroat, Sockeye, Winter Steelhead, Chum, Winter Chum, Fall Chinook, Pink Salmon, Riffle Sculpin, and Reticulate Sculpin. There are also Waterfowl concentrations in areas around the proposed treatment site.

*The information provided by WDFW from their lepidopteran database found the Taylor's Checkerspot in an area 2.75 miles southeast of the proposed treatment boundary. Taylor's Checkerspot is listed as a State and Federal endangered species. **See Attached Map***

- c. Is the site part of a migration route? If so, explain.

Yes, Pacific flyway for migrating birds.

- d. Proposed measures to preserve or enhance wildlife, if any:

WSDA will coordinate with other agencies in order to implement any appropriate mitigating measures with regard to the previously mentioned species. WSDA's measures to eradicate gypsy moth will preserve native plants, landscaping and other vegetation, thereby protecting the habitat needed by wildlife.

- e. List any invasive animal species known to be on or near the site.

Does Not Apply

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does Not Apply

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does Not Apply

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Yes, exposure to the insecticide during mixing and application, and some potential for spills. The potential for health hazards associated with this project are addressed in the FSEIS referred to in Section A, item #8 of this SEPA checklist. According to the FSEIS, there is minimal potential for significant adverse impacts on human health in projects of this type. It is the intent of the WSDA to reduce that minimal potential through compliance with the label, and actions detailed in #5 below.

- 1) Describe any known or possible contamination at the site from present or past uses.

Does Not Apply

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Does Not Apply

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

An insecticide will be used during the operational phase of the proposed project. No insecticides will be stored or produced on site.

- 4) Describe special emergency services that might be required.

Some potential need for the Department of Ecology "Spill Response Team" in the event of a major spill.

5) Proposed measures to reduce or control environmental health hazards, if any:

Mixing and application of insecticide will be done in accordance with the label. A WSDA representative will be present during loading and application of the insecticide and will monitor compliance with treatment specifications. Containment and clean-up materials will be on-site during applications. Interested stakeholders will be supplied with information about the materials to be applied. Stakeholders will also be given the opportunity to be placed on a call-ahead list and notified of dates and times of activity and of measures they may wish to take to protect themselves and their property.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short-term noise will be created by aircraft. Operations will be conducted during daylight hours, timing would be variable.

3) Proposed measures to reduce or control noise impacts, if any:

WSDA will conduct treatment operations at a time when they are least likely to impact residents.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Residential housing, Farming, Commercial, Industrial. The proposal will not affect land uses.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Yes, there are working farmlands on the proposed site. Crops include grass hay, caneberry, rhubarb, various market vegetables and fallow lands. None of these agricultural lands will be converted to other uses.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

- c. Describe any structures on the site.

Residential housing, Commercial, Industrial

- d. Will any structures be demolished? If so, what?

No

- e. What is the current zoning classification of the site?

*Residential LAMIRD- 2 Unit per 1 Acre (RL 2/1)
Rural Residential- 1 Unit per 5 Acres (RR 1/5)
Nisqually Agriculture (NA)
Long-Term Agriculture (LTA)
Neighborhood Convenience Commercial (NC)*

- f. What is the current comprehensive plan designation of the site?

Does Not Apply

- g. If applicable, what is the current shoreline master program designation of the site?

Rural

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

- i. Approximately how many people would reside or work in the completed project?

Does Not Apply

- j. Approximately how many people would the completed project displace?

Does Not Apply

- k. Proposed measures to avoid or reduce displacement impacts, if any:

Does Not Apply

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Does Not Apply

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

An organic insecticide will be used for the proposed treatments. Eradication of the gypsy moth infestation will help preserve agricultural and forestlands.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does Not Apply

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does Not Apply

- c. Proposed measures to reduce or control housing impacts, if any:

Does Not Apply

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does Not Apply

- b. What views in the immediate vicinity would be altered or obstructed?

Does Not Apply

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Does Not Apply

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does Not Apply

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

- c. What existing off-site sources of light or glare may affect your proposal?

Does Not Apply

- d. Proposed measures to reduce or control light and glare impacts, if any:

Does Not Apply

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Fishing, boating, walking trails

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

WSDA will notify occupants in the affected area about the upcoming eradication activities. WSDA offers a prior notification list upon which interested parties can request to be placed. Persons on the prior notification list receive calls and/or e-mails the day before applications occur.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

No

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Consultation with the USDA-APHIS-PPD and The Washington Information System for Architectural and Archaeological Records Data (WISAARD) was used to assess historic and cultural sites. Representatives from the USDA-APHIS have been consulting with the Nisqually Tribe.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Does Not Apply

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Does Not Apply

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No. The nearest transit stop is approximately 2-miles away.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Does Not Apply

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Does Not Apply

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Aerial applicator will provide FAA with congested airspace plan and will comply with all applicable FAA rules, regulations and directives. The FAA will be the final authority on all aircraft operations associated with this project.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Does Not Apply

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Does Not Apply

- h. Proposed measures to reduce or control transportation impacts, if any:

Does Not Apply

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

Does Not Apply

- b. Proposed measures to reduce or control direct impacts on public services, if any.

Does Not Apply

16. Utilities

- a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does Not Apply

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

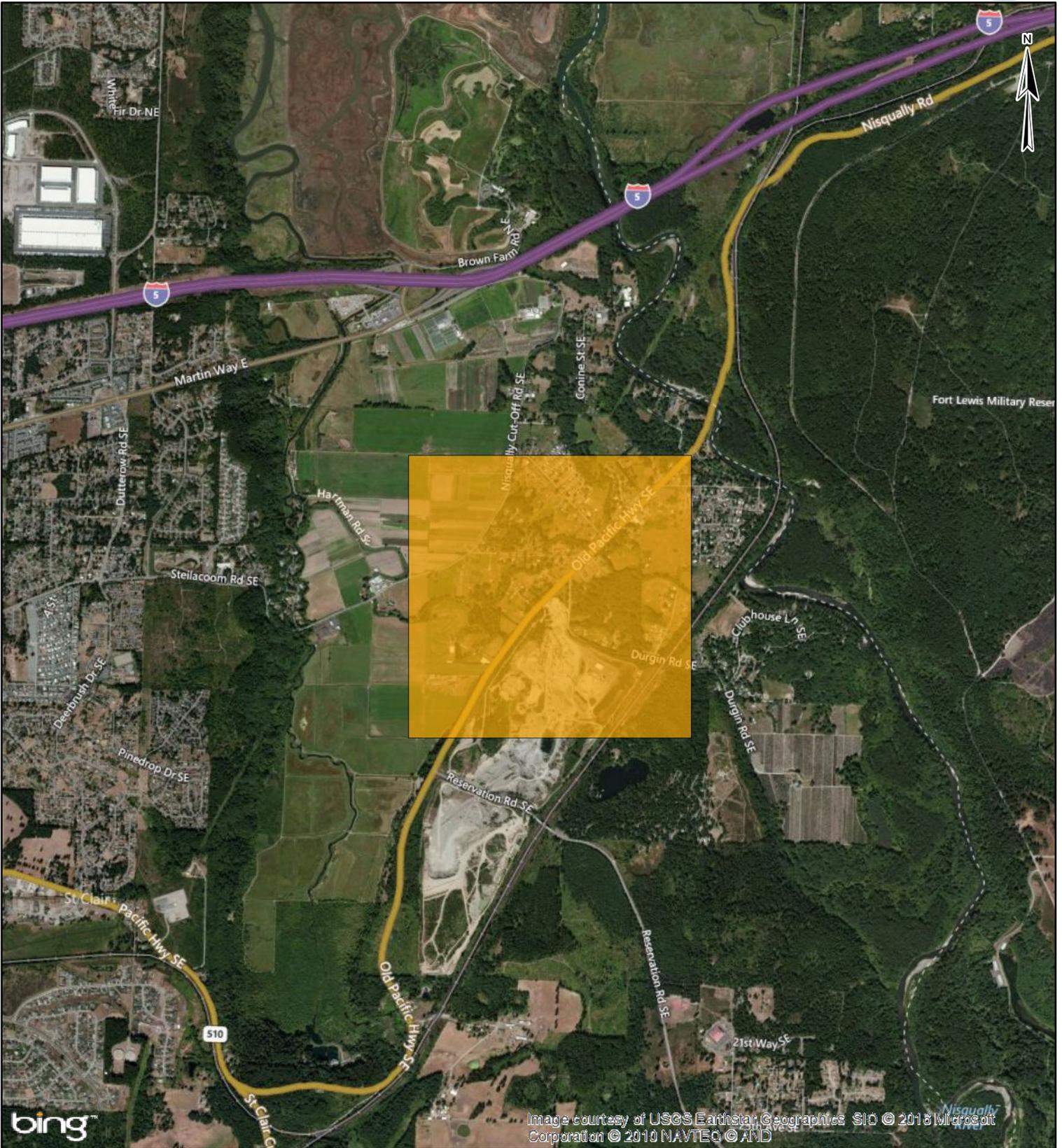
Signature:

Name of signee: Rian Wojahn

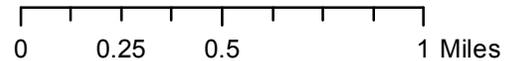
Position and Agency/Organization: Pest Biologist, Washington State Department of Agriculture

Date Submitted:

Proposed 2016 Gypsy Moth Eradication, Nisqually



Coordinate System: NAD 1983 HARN StatePlane Washington South FIPS 4602 Feet
 Projection: Lambert Conformal Conic
 Datum: North American 1983 HARN



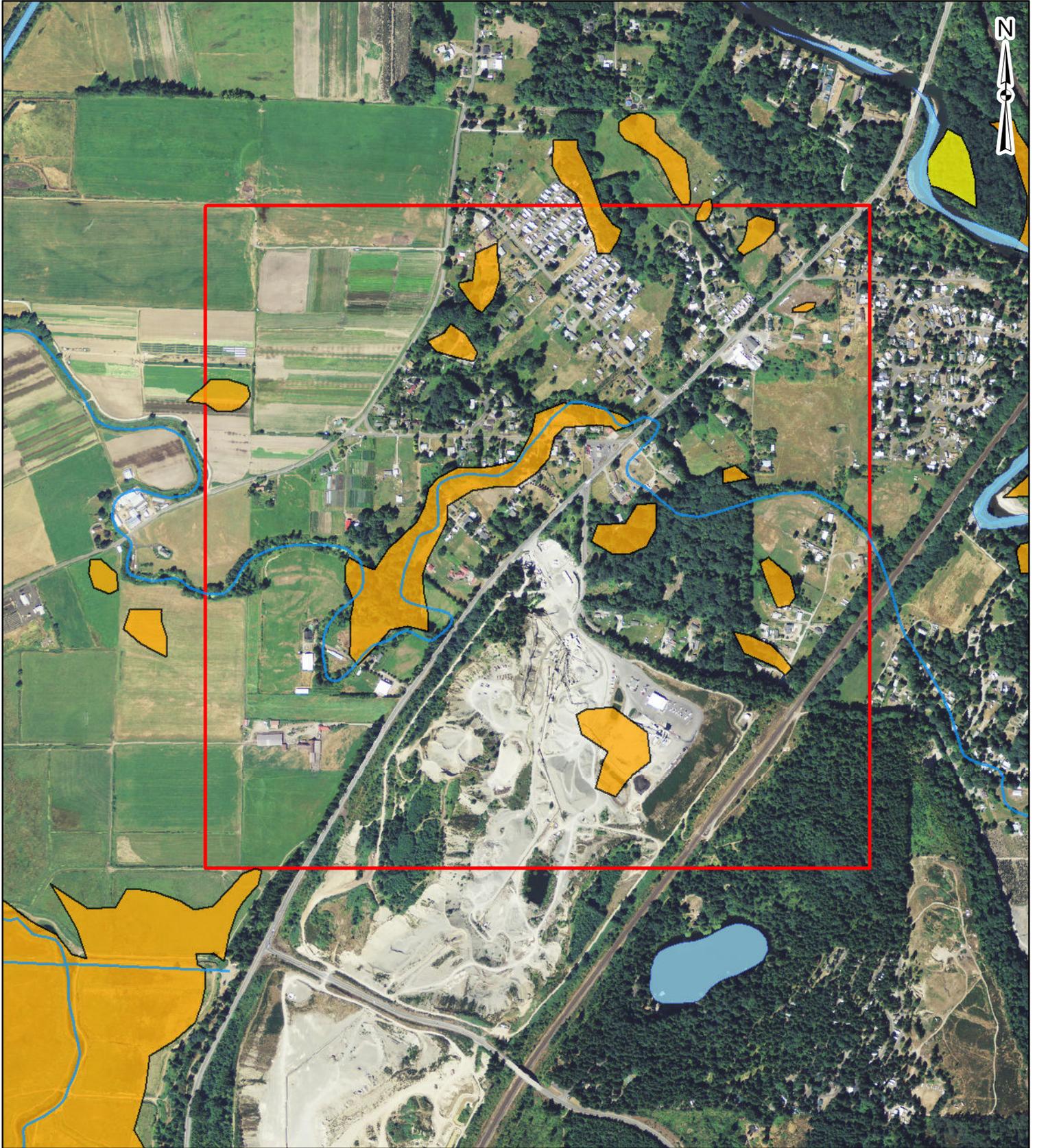
This data is provided on an 'AS IS', 'AS AVAILABLE' and 'WITH ALL FAULTS' basis. The content of this map and data are from many sources and are NOT warranted to be complete, accurate or current. All critical information should be independently verified. WSDA and its officials and employees assume no responsibility or legal liability for the accuracy, completeness, reliability, timeliness, or usefulness of any of the information.

Legend

Proposed Eradication, 640 Acres

Cartography by: Landon Udo ; 2-9-2016

Proposed 2016 Gypsy Moth Eradication, Nisqually



Coordinate System: NAD 1983 HARN StatePlane Washington South FIPS 4602 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983 HARN

0 0.125 0.25 0.5 Miles

Legend

-  Steams & Rivers
-  Waterbody
-  Wetlands
-  Freshwater Forested/Shrub Wetland
-  Proposed Eradication

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Cartography by: Landon Udo
3/15/2016