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Hello, Mr. Giesbrecht and the Petersburg Borough Assembly -

I am hoping to enlist the Borough of Petersburg's support in fighting the knotweed that occurs on Mitkof Island. There is currently a request for proposals from the Copper River Watershed Association for the control and eradication of invasive species with non-federal agencies and organizations. I would like to have the Borough, as a non-federal entity, submit the grant proposal for herbicide treatment of Japanese knotweed on Borough and private lands, as well as the State of Alaska right-of-way. The details:

- I intend to write the proposal and would rely on cooperating with the Borough for completion of the budget. The grant would include:
  - Contract with Southeast Alaska Watershed coalition for herbicide treatments on roughly three acres (scattered between the baler facility south to roughly Mile 8, Mitkof Highway).
  - o Training for Borough of Petersburg employee to become a state-certified herbicide applicator
- Grant and contract administration would require an estimated 20 hours of Borough staff time (based on the Petersburg Indian Association input for the RFP and report-writing upon completion).
- Staff treatment of knotweed on Borough lands is estimated at 4 hours; training for the herbicide applicator certification with the State is estimated at 40 hours (depends on the individual and their learning style).
- The herbicide deemed effective for knotweed in our environment is the aquatic-approved formulation of glyphosate (RoundUp Custom, previously Aquamaster).

## Methods

The Southeast Alaska Watershed Coalition's John Hudson would be contracted with to complete herbicide treatments on knotweed only -- for private homeowners who voluntarily agree, within the Mitkof Highway right-of-way (State of Alaska land), and on Borough lands. The work on Borough lands would be completed with the Borough of Petersburg staff member who will become the state-certified herbicide applicator (for on-the-ground training). Foliar spot spray with a 5-gallon backpack sprayer is the application method, applying a 1.5% solution of glyphosate at a 50 gallons per acre rate. John Johnson and other local volunteers will work with John Hudson: In late-July to early August the knotweed simply needs to be knocked over so that it is not as tall; herbicide treatments would occur in late-September to early October when the plant is senescing (to pull her herbicide into the root system).

- To give a rough idea of how much glyphosate would be used for the 2018 treatment: I used 13
  ounces to treat just under one acre in Kake in 2016; I used 7 ounces to treat the same knotweed
  population in 2017.
- Herbicide can only be applied during a dry weather window.
- Herbicide can be used to the water's edge but not in water.

Locations for herbicide treatment (See Figure 1 below):

- Borough Lands
  - o Waste pile behind the airport
  - o Baler facility
  - o Mountain View Manor entrance
  - o Gjoa and 2<sup>nd</sup> Street
- Private Lands
  - o Between Petersburg proper and Scow Bay, six property owners have currently volunteered to have knotweed treated with herbicide; one with tarp only.
  - Beyond Scow Bay will require that the volunteer group inform home owners and request permission to treat the knotweed
- Mitkof Highway right-of-way
  - Permits have to be obtained from the State of Alaska (the volunteer group is working on this)
  - Most infestations are between Scow Bay (mile 3) and Mile 6 Mitkof Highway, although a couple of smaller infestations are spreading

## Why worry about knotweed?

This shrub is aggressive, out-competing native vegetation. The dense stand prevents sunlight from reaching the soil and the knotweed leaf litter creates a layer of mulch that prevents other plants from sprouting. The roots can grow 7' deep and 20' across. Knotweed can take over yards and damage structures (even breaking through asphalt).

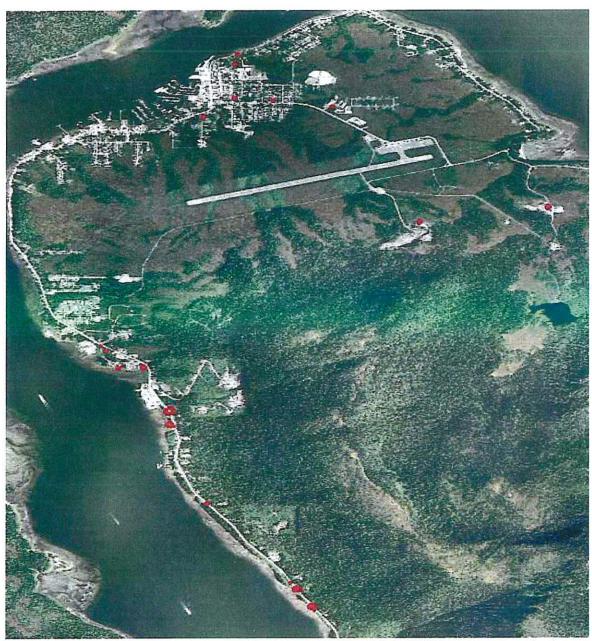
Knotweed can take over not just yards, but stream banks, beach areas and hillsides as well. The plant can cause erosion problems, clog waterways and salmon streams, and change the native vegetation which in turn reduces food sources for wildlife and lowers nutrient inputs into streams. Preventing the spread of this plant species from developed lands into pristine habitat is critical.

Fortunately, because there are discreet populations on Mitkof Island, we have the opportunity to eradicate the knotweed with persistence over time. The plant is currently being spread by home owners developing their land and by the brusher mowing the right-of-way along Mitkof Highway, in other words, we're behind the ball and ought to act.

Respectfully,

Joni Johnson

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**Figure 1:** Mapped knotweed locations on Mitkof Island are denoted in red. This map is not completely accurate, as one mapped infestation can no longer be found and not all infestations on private property are mapped.