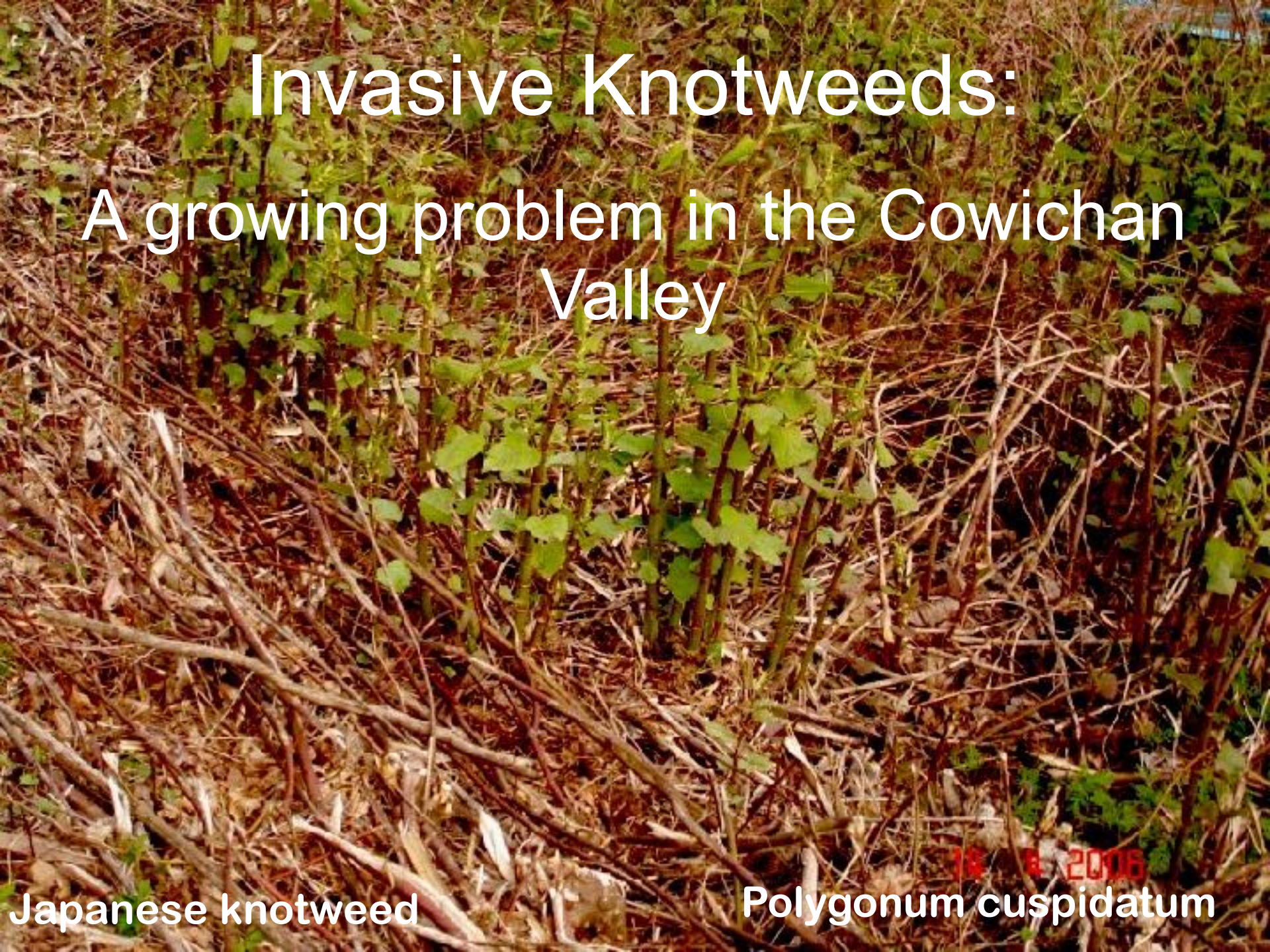
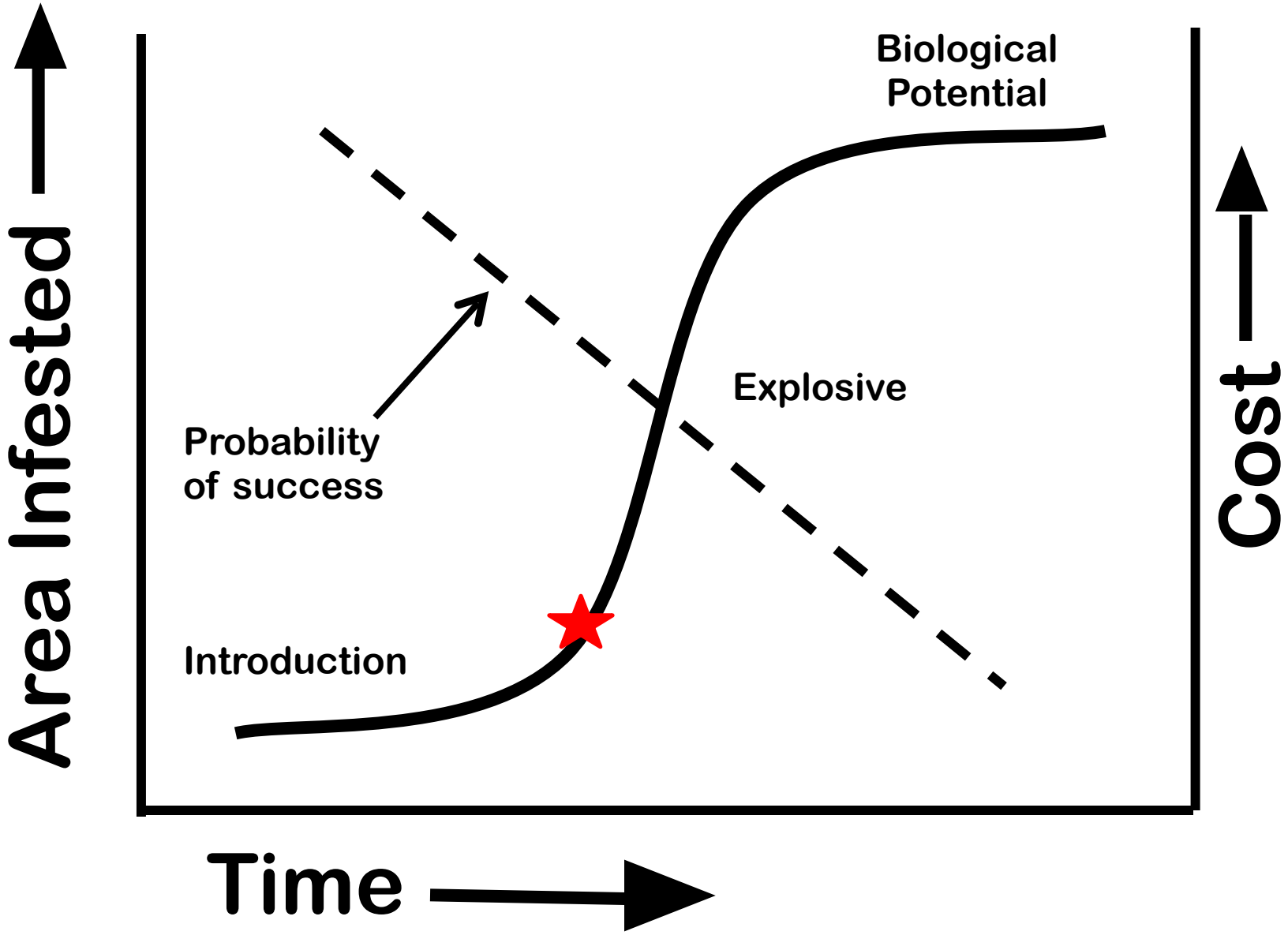
Invasive Knotweeds:

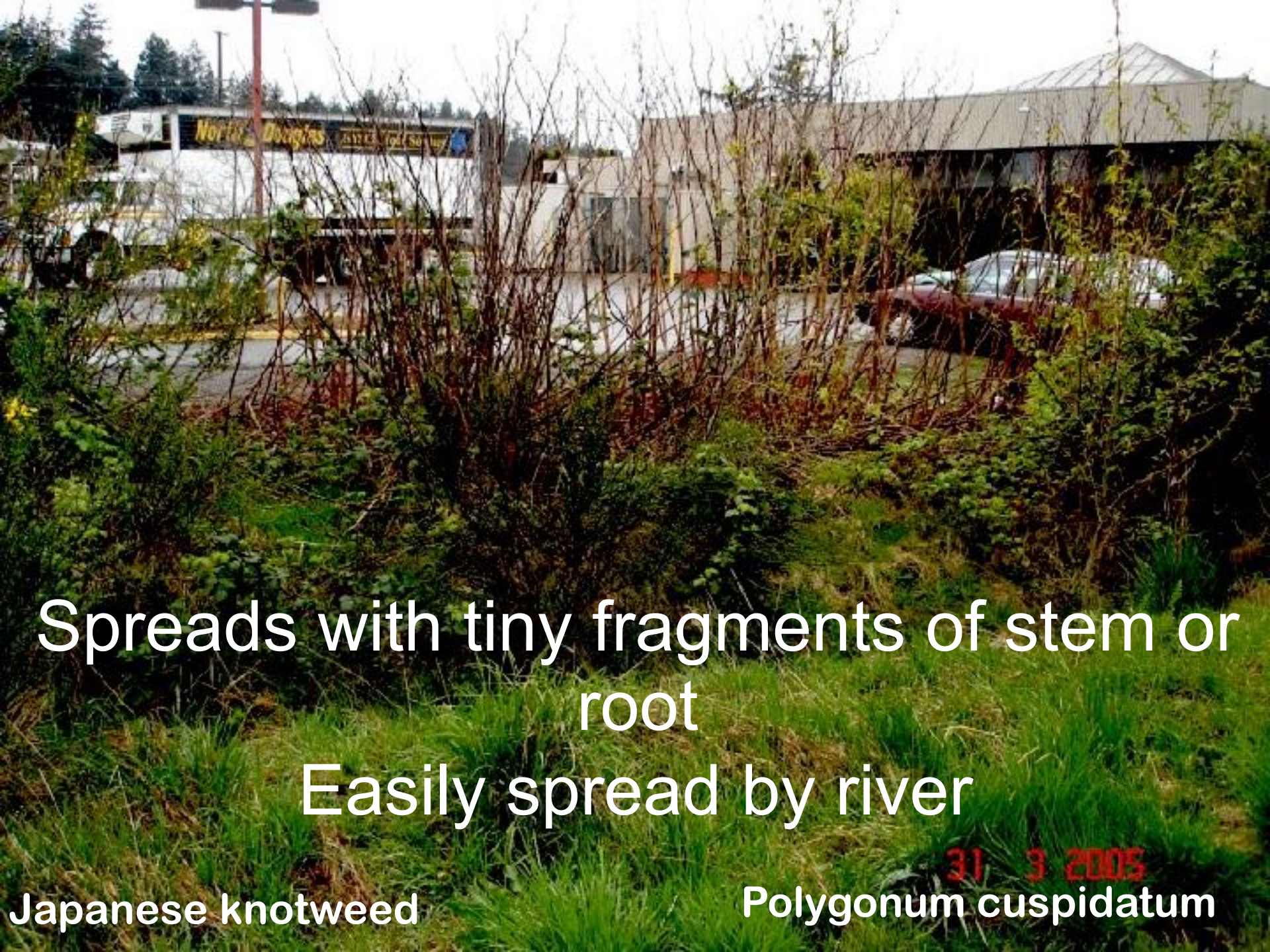
A growing problem in the Cowichan Valley




Cowichan River could be taken over

Biological Invasions




Spreads with tiny fragments of stem or root
Easily spread by river
31 3 2005
Japanese knotweed
Polygonum cuspidatum

These plants came in with a small construction project

Japanese knotweed

Polygonum cuspidatum


Movement of soil can spread plants
Japanese knotweed
Polygonum cuspidatum

Battle between invasives – the knotweed will win…

Japanese knotweed

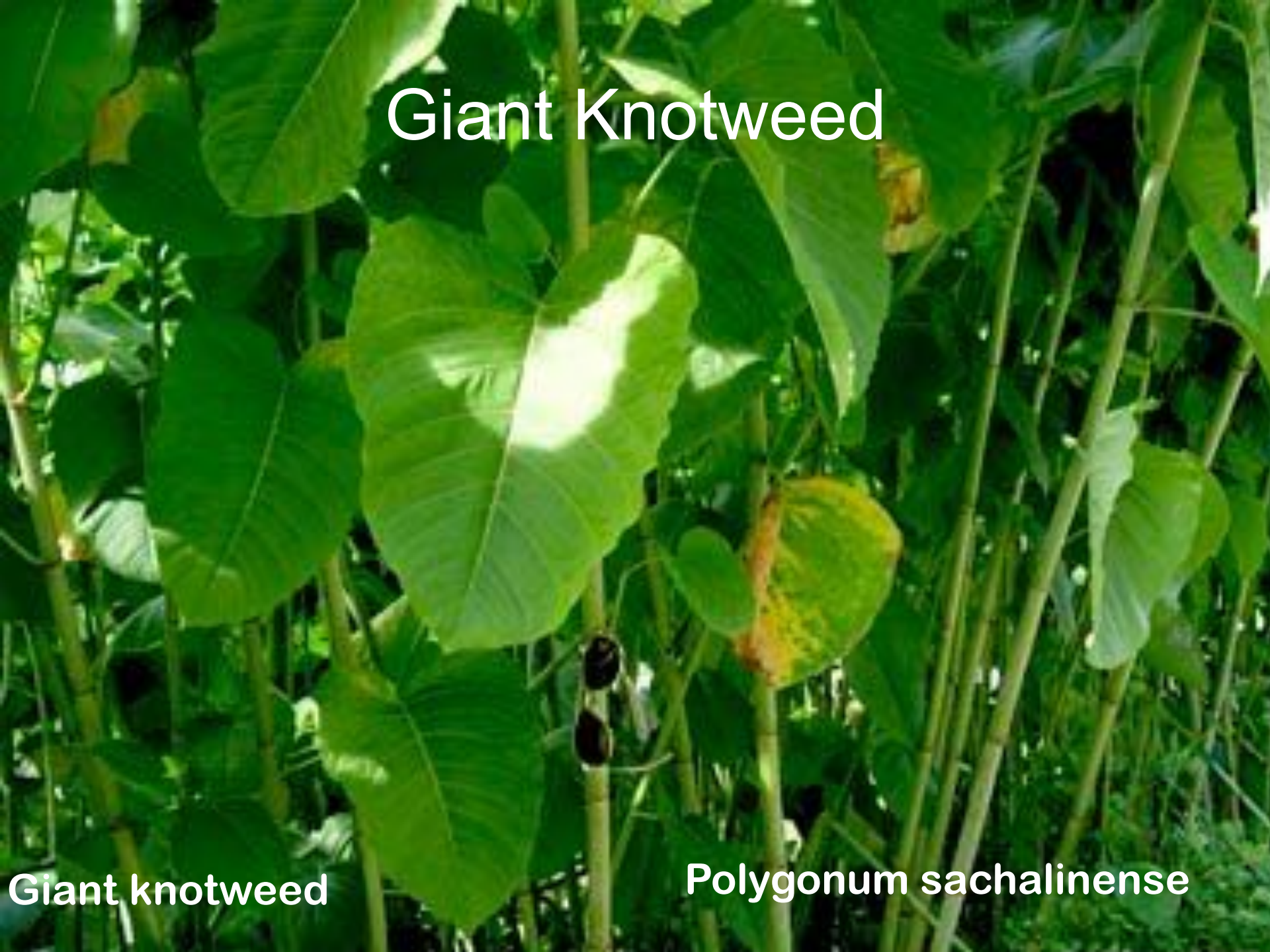
Polygonum cuspidatum

Himalayan blackberry

Rubus discolor

Three species and one hybrid

Giant Knotweed



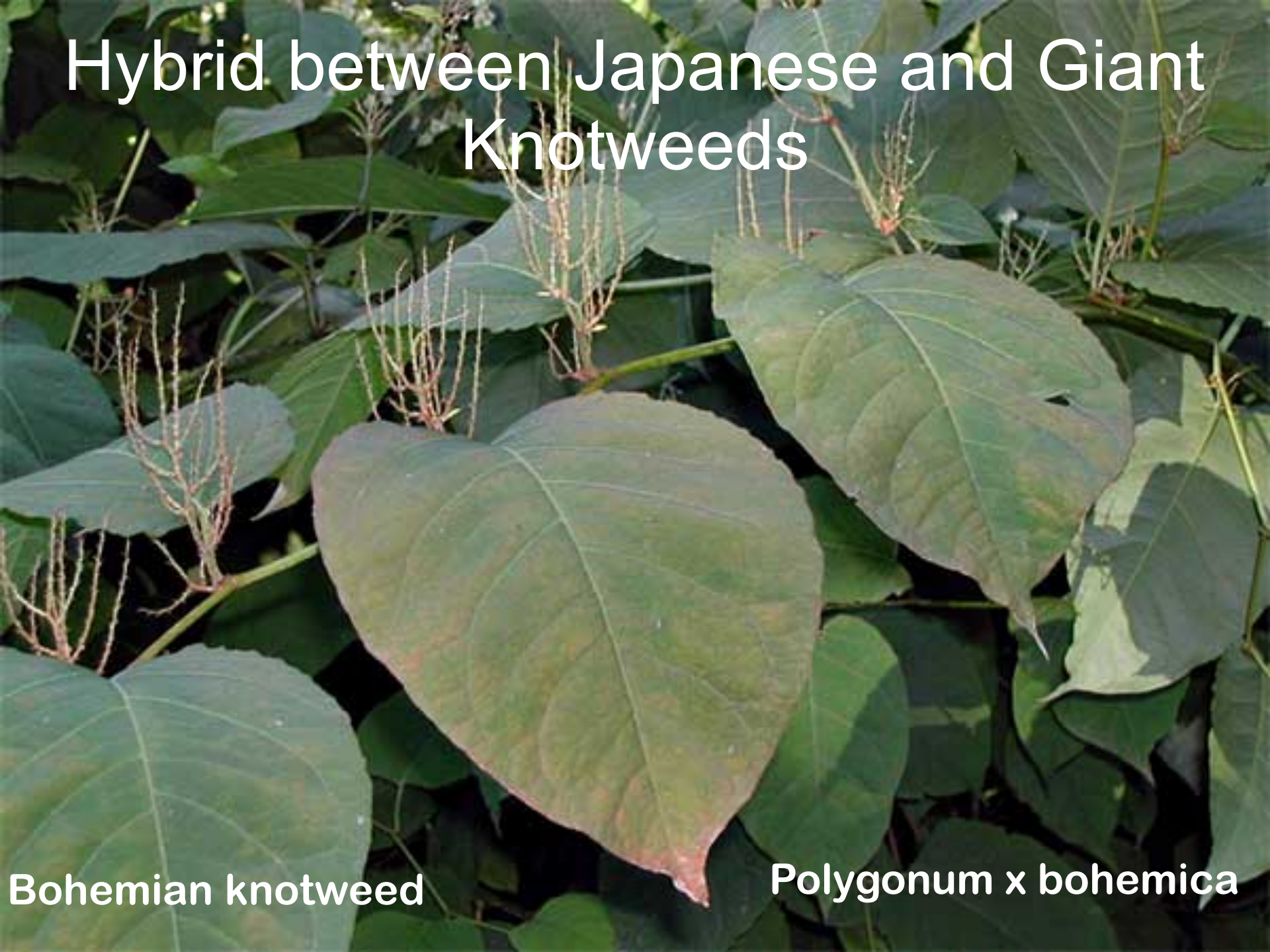
Giant knotweed

Polygonum sachalinense


Giant – as the name implies.
Giant knotweed
Polygonum sachalinense

Himalayan Knotweed

Hybrid between Japanese and Giant Knotweeds



Bohemian knotweed

Polygonum x bohemica


Sandy River, Oregon


Sandy River, Oregon


Sandy River, Oregon


Salt water treatment on Haida Gwaii

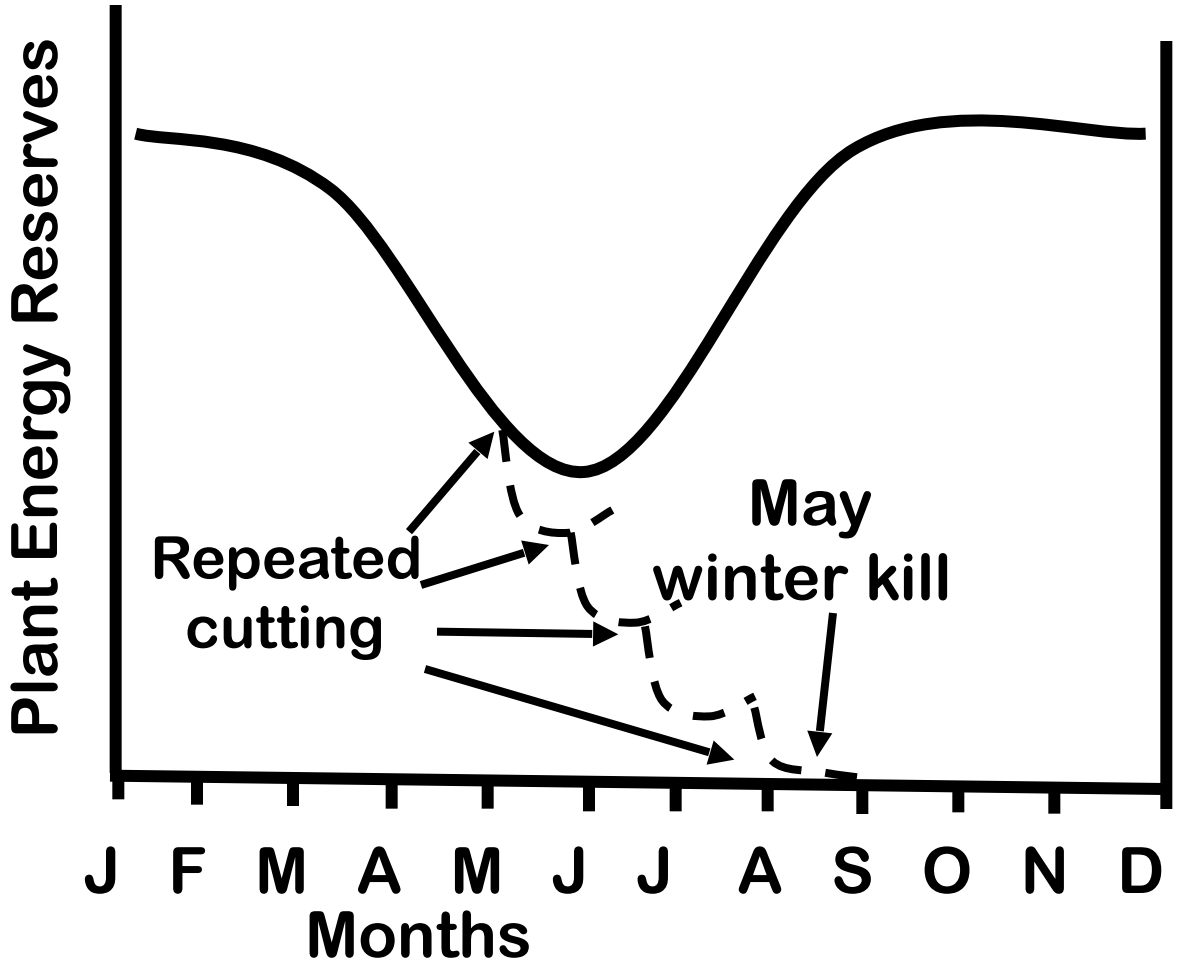

Traditional treatments have involved herbicides (e.g. Round-up = Glyphosate)

From *Coastal Invasive Species Committee:*

- The most effective way to win the knotweed battle is to use specially-selected herbicide.
- A product that can attack knotweed's extensive root system is required.
- Call a company with certified applicators. They can help you choose the appropriate treatment method for your property and get the job done safely.
- There is no silver bullet with knotweed. Knotweed can take a few years of treatments to achieve control.
- Be patient and committed to your treatment program and you can defeat this stubborn alien and protect your home.


An Ecologically Friendly Way of Treating Knotweed

Attack the plant at its weakest point



Repeated cutting will kill the plant.


Initial cutting, May 21, 2011, Duncan

Initial cutting, May 21, 2011, Duncan

Cutting, June 11, 2011, Duncan


Cutting, June 11, 2011, Duncan

Cutting, July 7, 2011, Duncan

Cutting, July 7, 2011, Duncan


Knotweed gone – November 17. 2015


2015 Koksilah Trials


Before Initial Cutting Treatment,
June 25, 2015

After Initial Cutting Treatment,
June 25, 2015


Before Second Cutting Treatment,
July 8, 2015


After Second Cutting Treatment,
July 8, 2015


Before Third Cutting Treatment,
July 24, 2015


After Third Cutting Treatment,
July 24, 2015

Before Fourth Cutting Treatment, August 7, 2015

After Fourth Cutting Treatment, August 7, 2015

Before Fifth Cutting Treatment,
August 27, 2015


After Fifth Cutting Treatment,
August 27, 2015

Before Sixth Cutting Treatment, September 11, 2015


After Sixth Cutting Treatment,
September 11, 2015

Before Seventh Cutting Treatment, September 28, 2015

After Seventh Cutting Treatment, September 28, 2015

Before Eighth Cutting Treatment, October 14, 2015

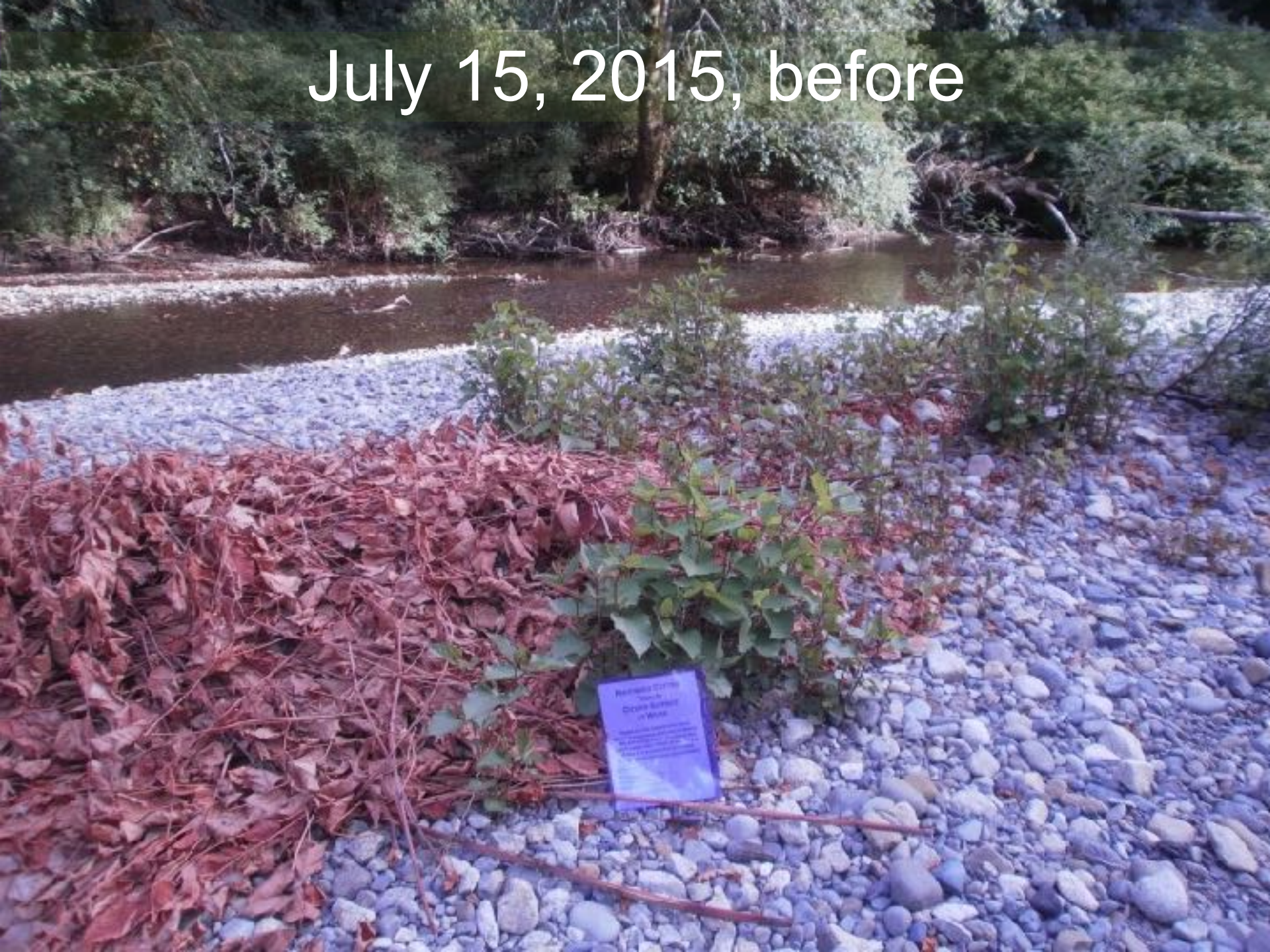

After Eighth Cutting Treatment,
October 14, 2015

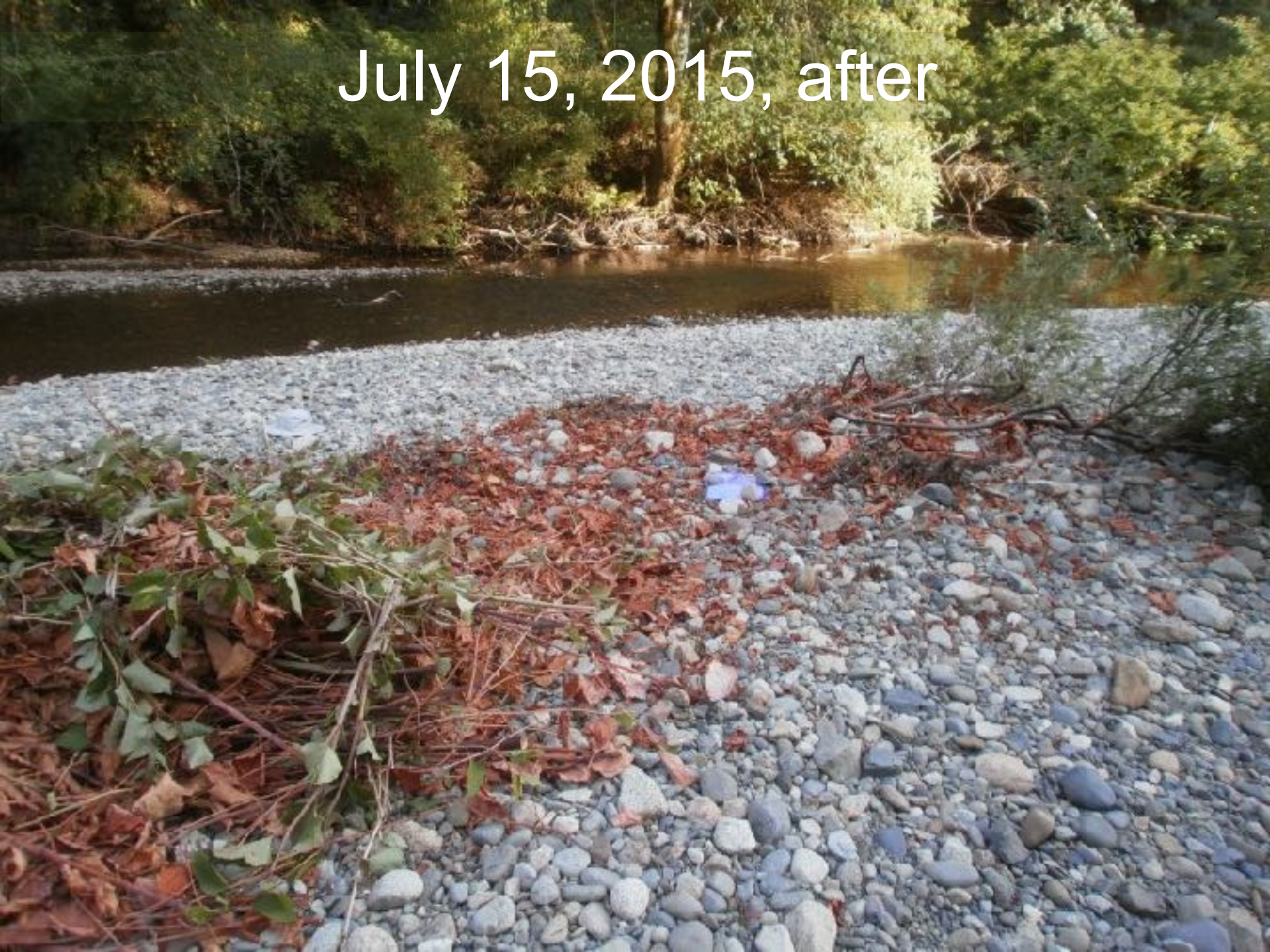

End of the season,
Thanks Dave Lindsay!
October 14, 2015

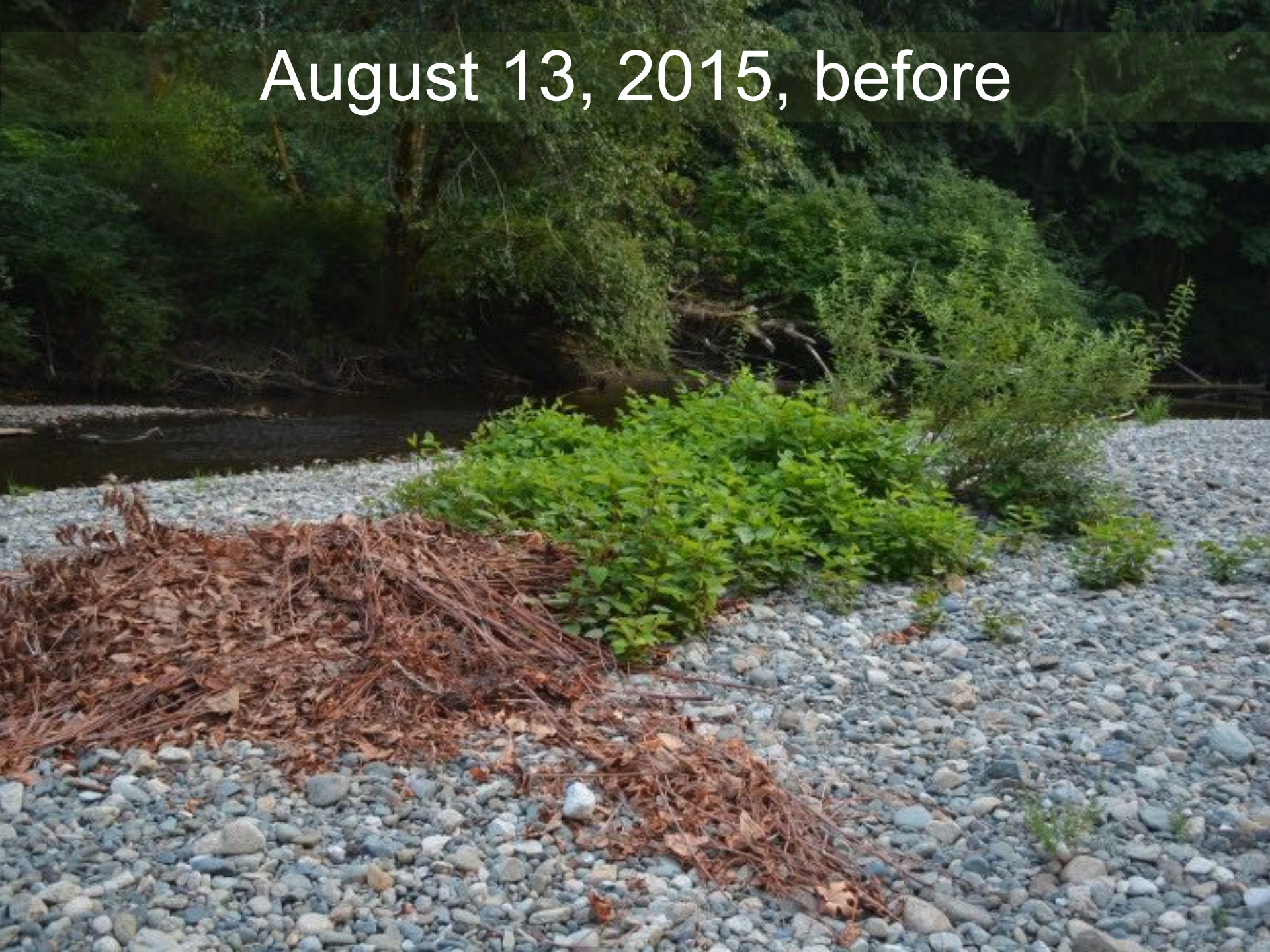
Gravel bar site, June 25, 2015


After cutting, June 25, 2015

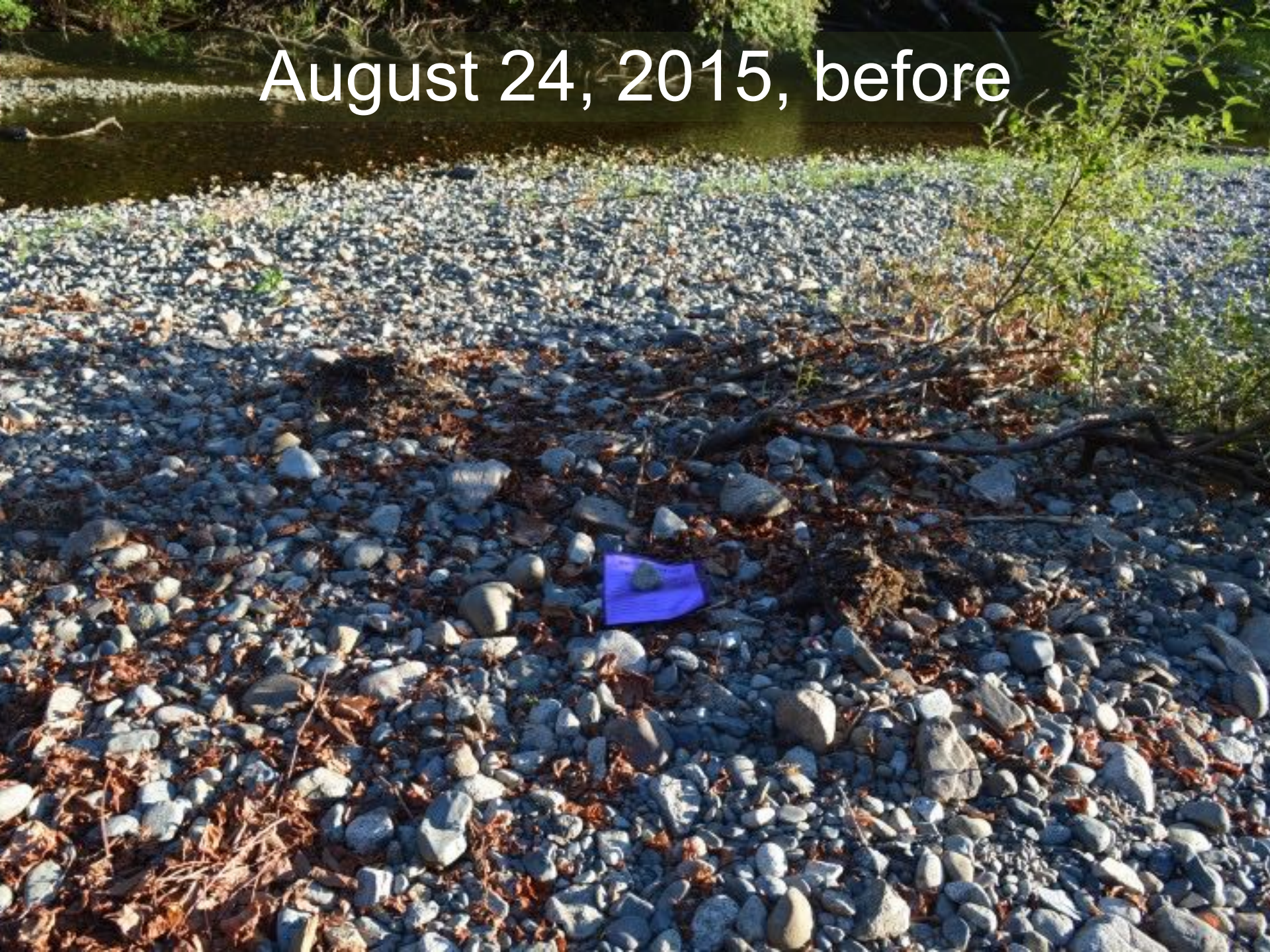
Decomposition of biomass


July 15, 2015, before

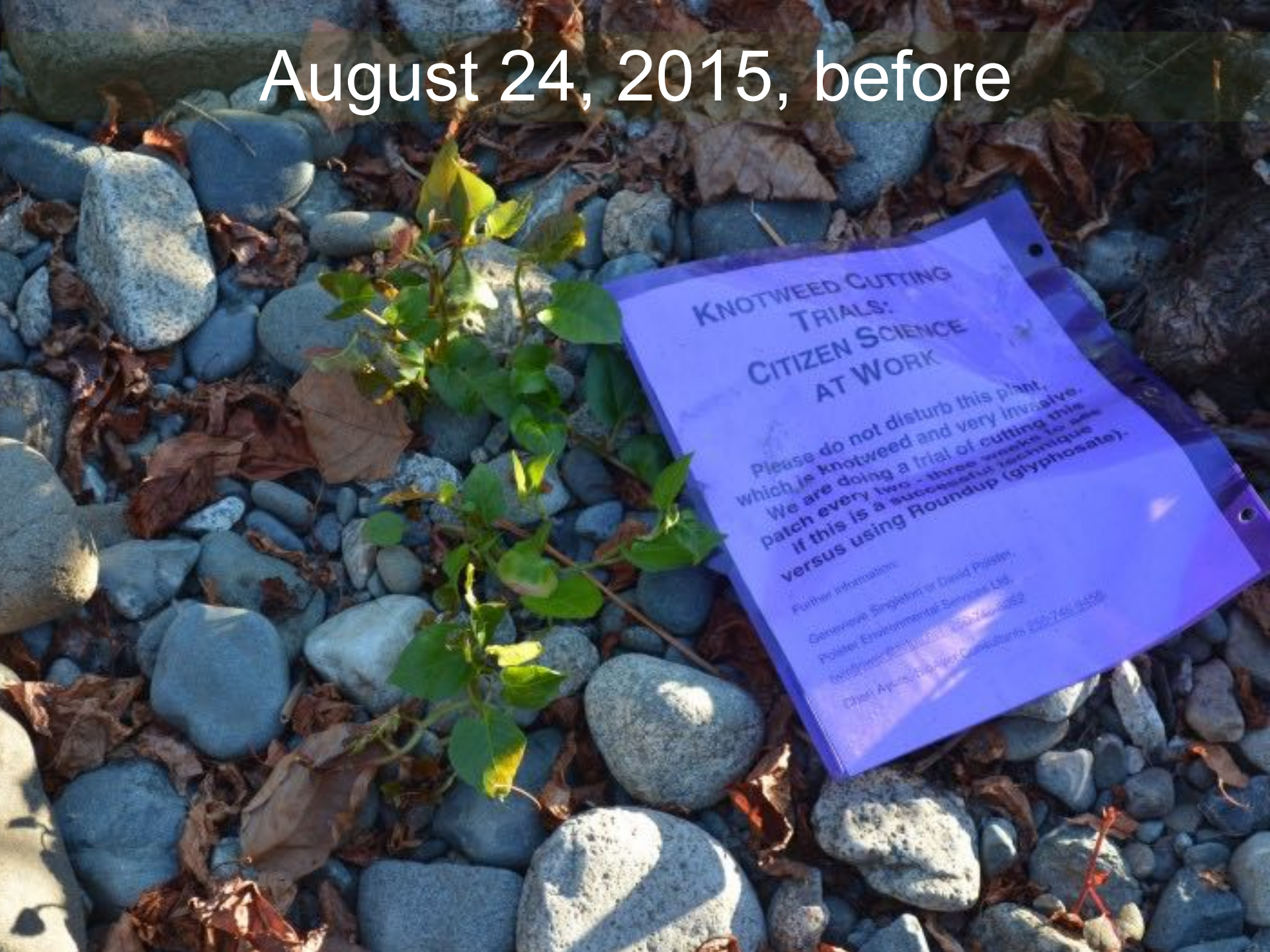

July 15, 2015, after

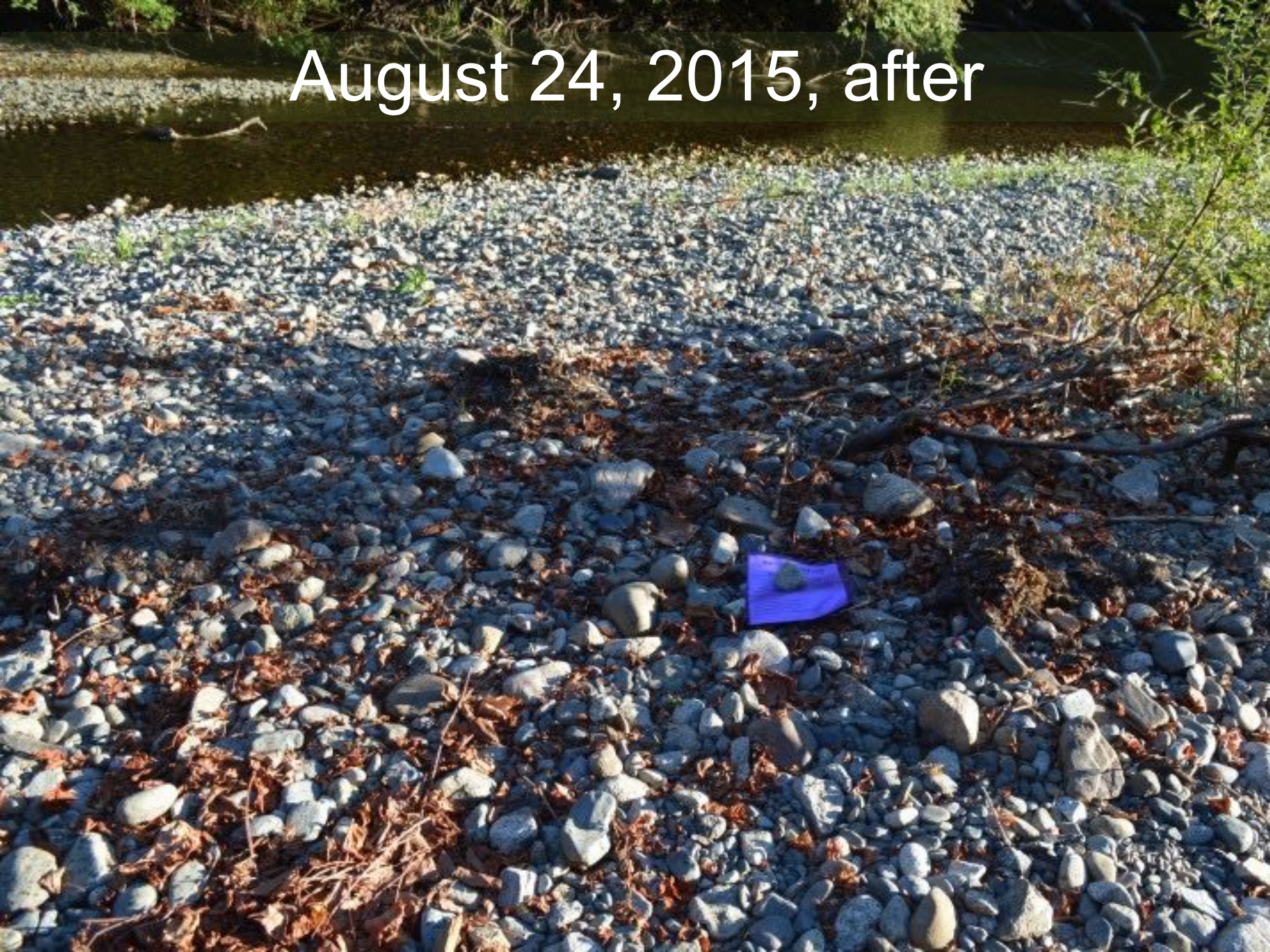

August 13, 2015, before

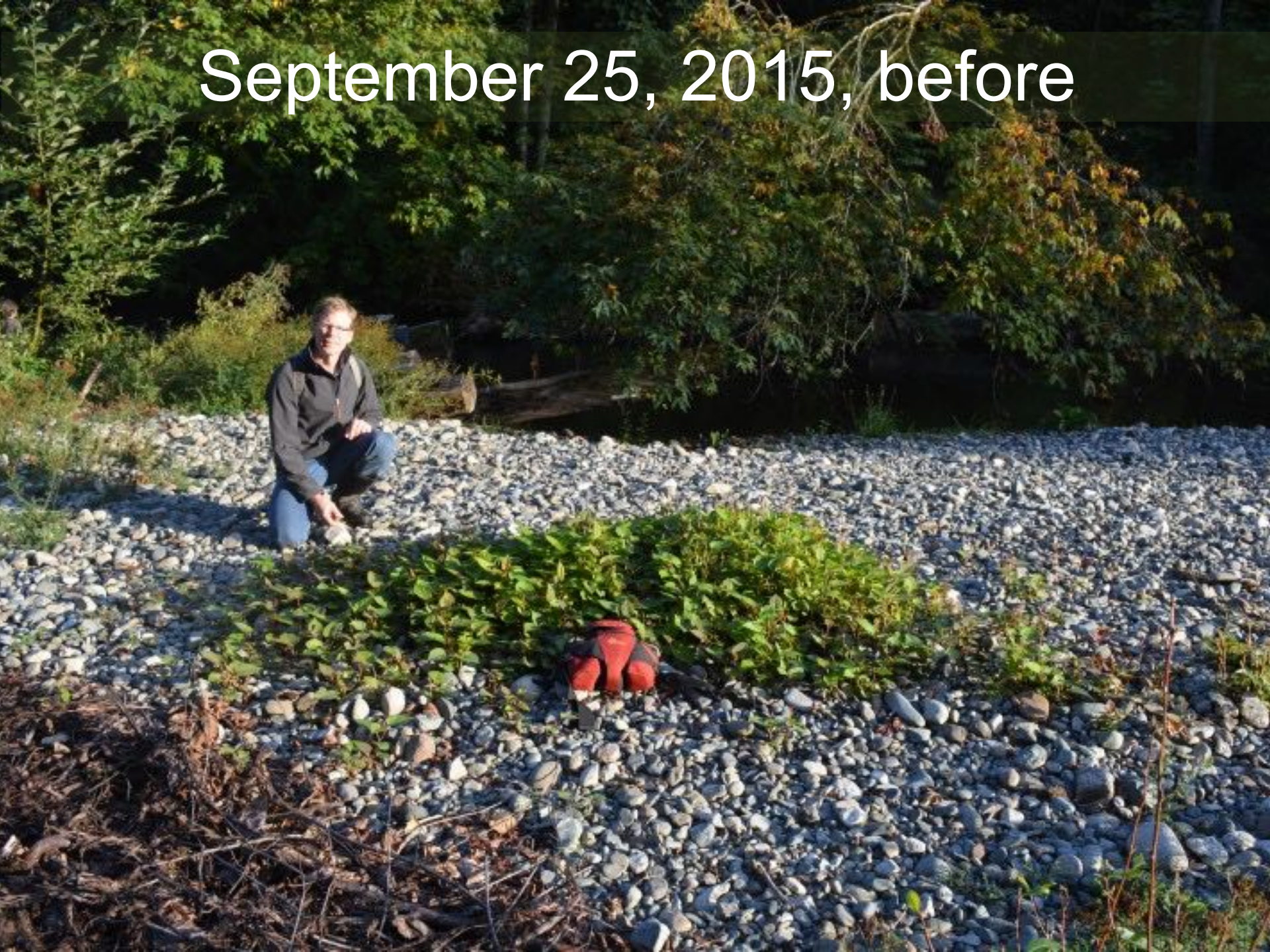
August 13, 2015, after

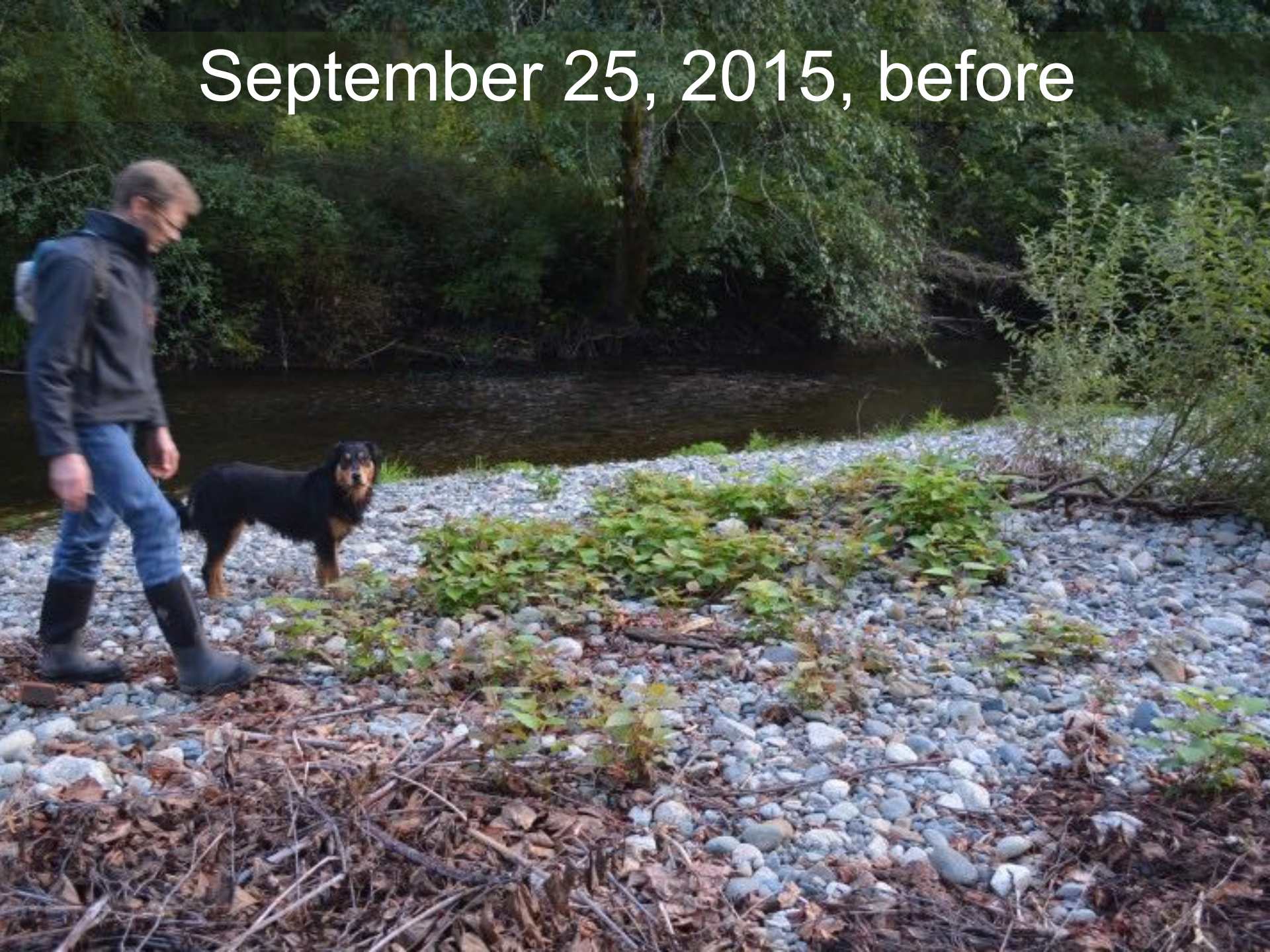

August 24, 2015, before

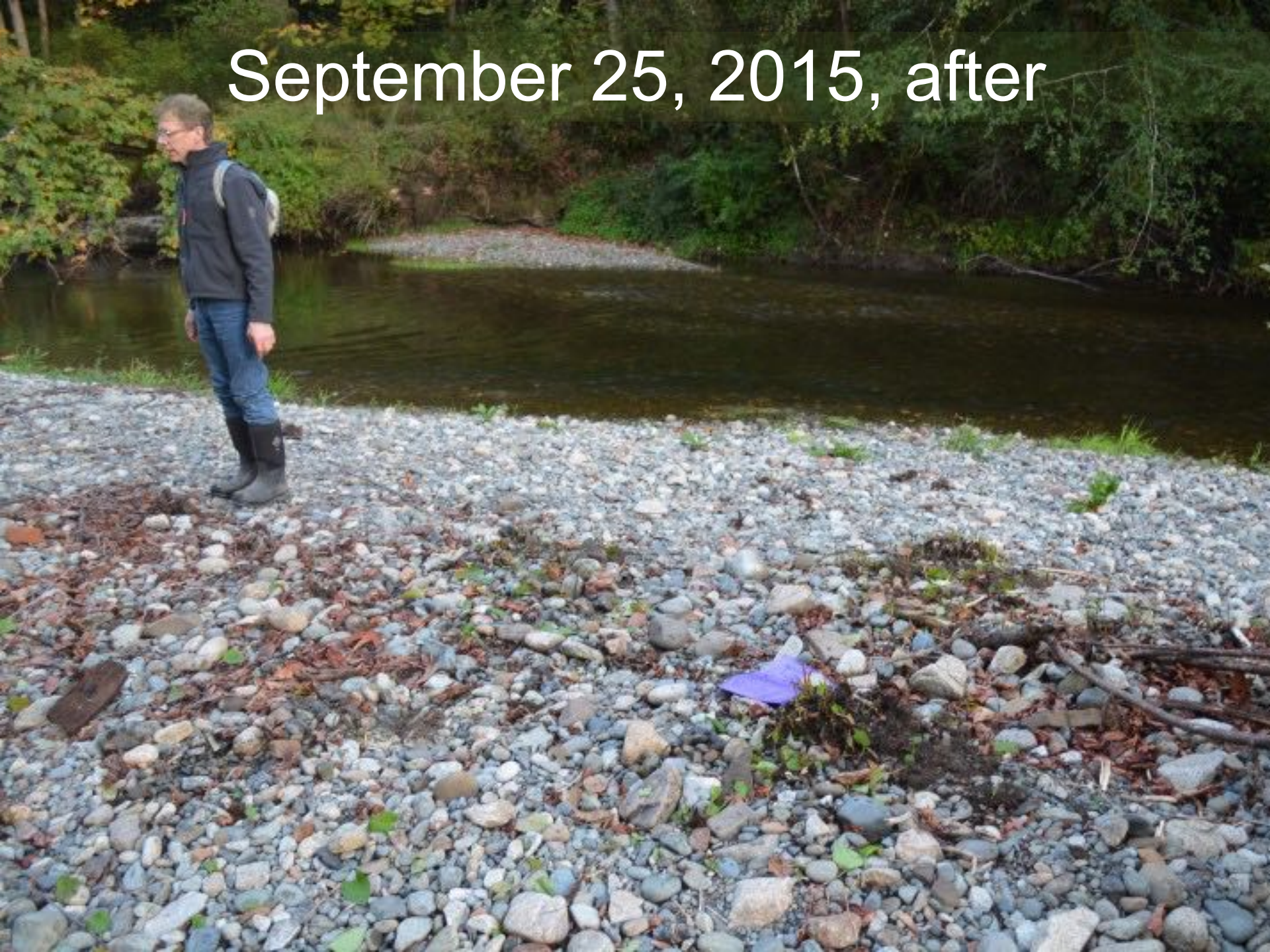
August 24, 2015, before



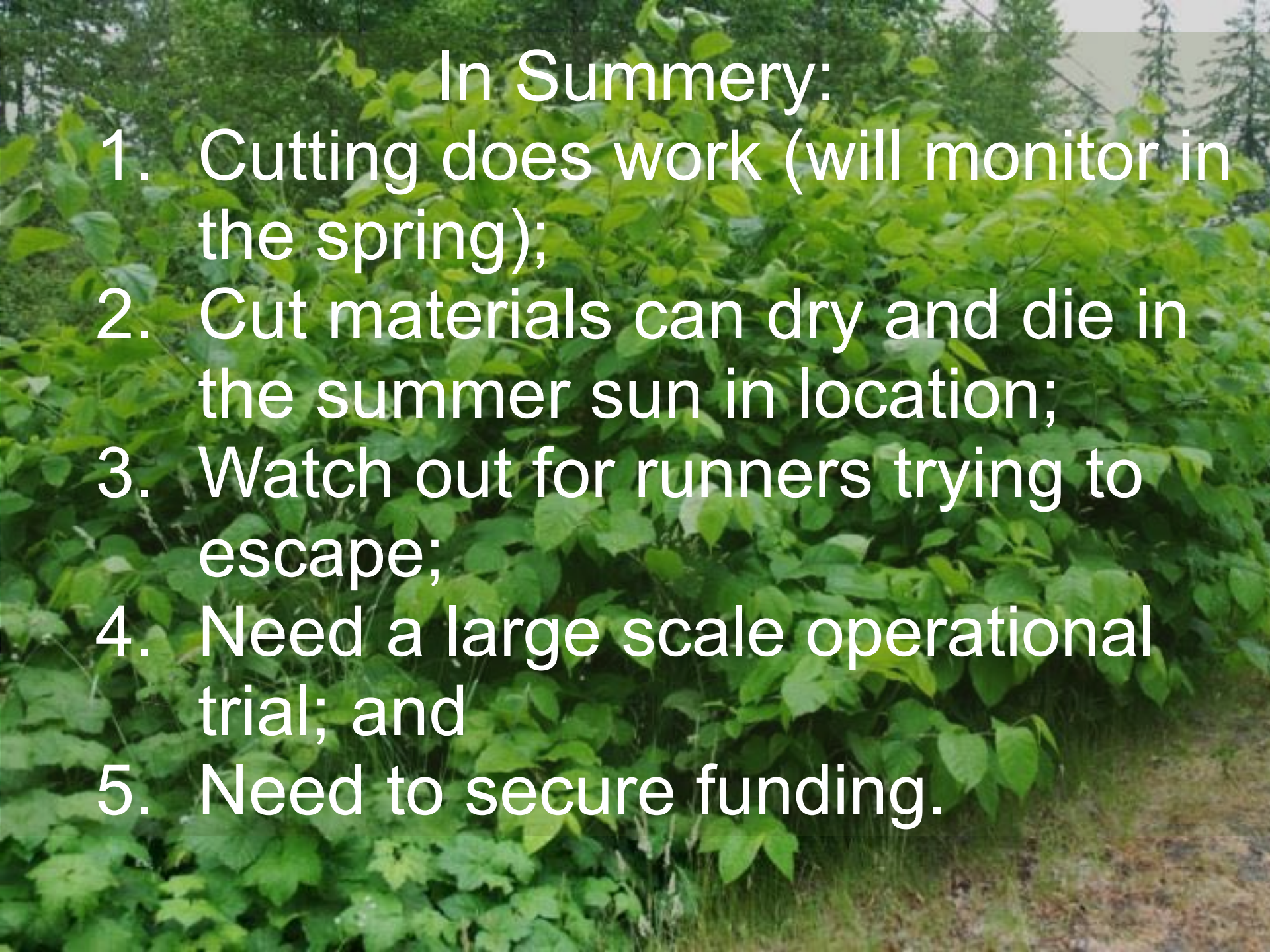

August 24, 2015, after


September 25, 2015, before


September 25, 2015, before


September 25, 2015, after


October 9, 2015, end of season,
Thanks Cheri Ayers



In Summery:

1. Cutting does work (will monitor in the spring);
2. Cut materials can dry and die in the summer sun in location;
3. Watch out for runners trying to escape;
4. Need a large scale operational trial; and
5. Need to secure funding.

Strategy to Remove Knotweed from the Cowichan River Corridor

Hire 3 or 4 third year biology students

Starting May 15th, map all locations of knotweed along the river

Starting June 15th, cut all knotweed sites

Continue cutting every 2 weeks until October.

Repeat this process with 2 students the following year