

6/24/96

To: File

From: Dennis O'Neil

Subject: Inspection of vegetation on St. Johns Landfill with consultant Mark Wilson and with Mike Bechtel on June 21, 1996

We first visited the fenced in portion of the test plot on subarea 1. There was an excellent stand of what Mark said was the native grass *Bromus carinatus* (California brome grass) about waist high and about to drop seed. Mark recommended that we not try to harvest since it is too late to do so. Rather we should allow it to drop seed and mow it in a month or so if necessary to reduce fire risk. This stand was in the solarization and tillage test plot. The herbicide / not till had some Bromus but also many other non natives. There was no sign of the *Festuca idahoensis*. There was also Bromus in the tillage only test plot which was not protected by a fence from the thousand or so sheep grazing the area. Not quite as lush as the solarization plot but still fairly impressive. Of most importance was that this test plot was only lightly grazed by the sheep compared to the rye grass which was heavily grazed. Yay!!! The acid pH test plot also had a stand of Bromus, about as good as the till plot and had not been heavily grazed by the sheep.

Mark and Dennis also looked at the shrub transects planted in early 1992 on subarea 1. There were a few Nutka rose and *Symphoricarpos albus* plants remaining but they had been heavily eaten by deer or the sheep. We saw some localized erosion in the steep slope by the north power tower base probably caused by the sheep.

Driving along the north perimeter road we noticed a large stand of invasive cow thistle and Canada thistle (flowering with light blue or lavender flowers). We also saw tall plants which Mark said were a type of wild carrot. They heavily infest the riparian area downslope of the road and have begun to colonize the upslope also, especially the storm water ditches. Also Himalayan blackberry was beginning to colonize the drainage ditches.

We visited the test plot for the native plant blue wild rye (*Elymus glaucus*) which is at the top of subarea 5. This grass was subject to some loss due to grazing by wild geese early in the year. Some of this native grass was seen along with a similar amount of non native rye. Unfortunately most of subarea 5 including this test plot was mowed before the *Elymus* could set seed. Dennis asked Mark for his opinion as to whether there was enough non native grass on subarea 5 to prevent erosion when the winter wheat nurse crop died out. Mark believed there was enough to prevent erosion.

Dennis noted that we were collecting soil which had been cooked at a high temperature to remove petroleum contamination. This soil was accepted as topsoil after meeting specifications and being approved by DEQ for this use. This soil was being stockpiled separately to be separately mixed with sewage sludge compost and applied to known locations on the cover of subarea 4. It is hoped that the processing of this soil at high temperature will result in little or no contamination by weed seeds. These known locations would be planted with a mixture of Bromus and *Elymus* in September.

Mark approved of this idea except that he opposed the use of compost because it may introduce seed contamination. A seed drill would be the best planting method although broadcast track method could be used if necessary. He believed that we could use less than 30 lbs per acre of each grass if we used the drill.

cc: Mike Bechtel
Janell Davis
Pete Hillmann
Jim Morgan
Mark Wilson



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memorandum

July 15, 1996

TO: Dennis O'Neil

SUBJECT: SJL inspection 6/21/96 (O'Neil memo dated 6/24/96)

Dennis, Thank you for writing up notes of the our site visit on June 21, 1996. I have a few additions to your memo to file:

-We saw good stands of nearly 100% *Bromus carinatus* (CA Brome-grass) in both the solarization and the herbicide/no till plot. The herbicide stand was slightly larger, but then again so was the plot size. Both of these stands were inside fenced exclosures. Poorer (i.e. weedier) stands were also noted in the southern most till only plot and the herbicide/no till plots. The Brome-grass and other grasses in these two areas were being selectively grazed by sheep; the sheep seemed to prefer grasses other than the Brome.

-The following invasive plant species were observed (in a very cursory survey!) to be established on the landfill subareas 1-3:

- Scotch Broom (*Cytisus scoparius*)
- Ripgut Brome (*Bromus rigidus*)
- Cheatgrass (*Bromus secalinus*)
- Medusahead Rye (*Taeniatherum caput-medusa*)
- Reed Canary Grass (*Phalaris arundinacea*)
- Canadian Thistle (*Cirsium arvense*)
- Bull Thistle (*Cirsium vulgare*)
- Hemlock (*Cicuta* spp. or *Conium* spp.)
- Himalaya Blackberry (*Rubus discolor*)

Many of the plants above are classified as noxious by the Oregon State Department of Agriculture. In addition to the plants listed; there are many other invasive species beginning to establish.

mgw memorandum 7/15/96 continued-

SUBJECT: Proposed addition to project work scope:

- A. Prepare an integrated vegetation management (IVM) plan for the landfill and adjacent areas of the Columbia Slough. This IVM plan would consist of the following components:
- I. Develop vegetation maintenance and management policy and goals.
 - II. Prepare a pest plant field identification manual.
 - III. Identify least environmentally damaging management options for control of established pest plants.
 - IV. Recommend a sequencing plan for vegetation maintenance and management activities.
- B. Project duration and timeline: Prepare a draft IVM Plan for use during the 1997 growing season (February through October). Field check draft plan and prepare a final plan during 1997 growing season.
Project budget: to be negotiated

cc: Mike Bechtel/Janelle Davis/Pete Hillman

Jim Morgan [and/or Emily Roth]