



LUMMI INDIAN BUSINESS COUNCIL

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MEMORANDUM

DATE: August 30, 2011

TO: Jeremy Freimund, P.H., Water Resources Manager

FROM: Jean Snyder, Water Resources Specialist II

SUBJECT: Community Clean-Up Event – April 13-17, 2011

Pursuant to your direction, I coordinated with the Lummi Housing Authority (LHA), Northwest Recycling, and Sanitary Services Company Inc. (SSC) to help conduct a Community Solid Waste Clean-up event for the April 13-17, 2011 period. Like many rural areas, solid waste disposal and illegal solid waste dumping have been a documented problem on the Lummi Indian Reservation (Reservation). One strategy for addressing solid waste management problems on the Reservation is providing community clean-up events at no cost. The LHA has conducted community clean-up events since 2008 and worked in conjunction with the Lummi Natural Resources Department (LNR) to conduct Community Clean-up events in 2009 and 2011.

The community clean-up event during May 2008 was solely sponsored by the LHA. The 2008 Community Clean-up event was comprised of distributing twenty 40-yard containers for household waste and ten metal recycling containers at eight locations on the Reservation in close proximity to residential areas. At one location, freezers and refrigerators were also accepted for disposal. In addition, the LHA removed all solid waste burn barrels from tribally owned housing units.

During October and November 2009 the Lummi Natural Resources Department (LNR) worked in conjunction with the LHA to sponsor a Community Clean-up event that took place over the November 4-8, 2009 period. Pursuant to a memorandum of understanding (MOU) between the LNR and LHA that identified the roles and responsibilities of the parties, this clean-up event included twenty 30-yard containers for household waste, four metal recycling containers, and an area for special waste disposal (e.g., tires, refrigerators, and propane tanks) at the Stommish Grounds. In addition, the LHA provided remote solid waste pick-up from individual homes that needed assistance. The LHA provided the labor during the community clean-up event. A total of 76 households had 42 tons of household solid waste, 18 refrigerators, 29 tires, and 4 washer/dryers removed and disposed of by the LHA remote clean-up teams. The solid waste collected from individual homes was brought directly to an off-Reservation transfer station for disposal. Also as part of continuing solid waste management on the Reservation, an abandoned trailer in the right-of-way along North Red River Road was demolished and disposed in December 2009. Overall the 2009 Community

Clean-up event collected and disposed of approximately 148 tons of solid waste, 506 tires, and 41 appliances.

Due to the success of the 2009 Community Clean-up event, LHA staff and LNR staff with financial assistance from an EPA Performance Partnership Grant (Assistant Agreement No. BG-00J13401-0), decided to organize a similar event in 2011. A community clean-up organizational/planning meeting with LNR staff and LHA staff took place on February 11, 2011. During this meeting, the parties agreed that the 2011 community clean-up would have twenty 30-yard containers for household waste, four metal recycling containers, remote solid waste pick-up, remove solid waste from four illegal dumpsites, and accept special waste (e.g., tires, refrigerators, and propane tanks). Unlike the 2009 community clean-up event which provided dumpsters and recycling containers at one central location (Stommish Grounds), the 2011 community clean-up event placed three solid waste dumpsters and one recycling container at the Lummi Planning Department parking lot (Figure 1). The remaining 17 dumpsters and three recycling containers were placed at the Stommish Grounds (Figure 1) along with collection of all the special waste (e.g., tires, appliances, refrigerators). The purpose of adding a second site at the Lummi Planning Department was to increase convenience for those residents that live in the northern portion of the Reservation. Similar to the 2009 clean-up event, no household hazardous waste, motor oil, automobiles, antifreeze, pesticides, herbicides, light bulbs, and cleaning products were collected. However, during the 2009 Community Clean-up, disposal of latex paint and oil in the household solid waste was frequently observed. In order to prevent this from occurring, latex paint was collected during 2011 at the Stommish Grounds and cat litter was mixed with the paint so it could be disposed of with the household waste. Table 1 compares the organization of the three community clean-up events.

Table 1. Comparison of the Three Community Clean-up Events on the Reservation

	2008	2009	2011
Number of 40-yard Containers for Household Waste*	20	0	0
Number of 30-yard Containers for Household Waste	0	20	20
Number of Metal Recycling Containers	10	4	4
Number of Sites Where Containers Deployed	8	1	2
Remote Solid Waste Pick-up	Yes	Yes	Yes
Clean-up of Illegal Dumpsites	No	Yes	Yes
Household Hazardous Waste Collection	No	No	No
Number of Operational Days	4	5	5
Cost	~\$22,000	\$35,288	\$57,049

* Sanitary Service Company Inc. did not rent 40-yard containers after 2008

The 2011 Community Clean-up event took place April 13 through 17 from 8 am to 5 pm. In addition to providing two disposal locations, the LHA provided remote pick-up of solid wastes from individual homes that needed assistance. Homeowners or renters contacted the LHA before April 14, 2011 for assistance in transporting solid waste or for additional garbage bags. The LHA provided and funded the labor during the Community Clean-up event and also removed solid waste from four illegal dumpsites on the Reservation. The Water Resources Division of the LNR provided funding for the rental of the containers and solid waste disposal costs. Christina Solomon (LHA) coordinated with SSC and Northwest Recycling to have recycling and solid waste drop boxes delivered and disposed. As shown in Figure 2, a Community Clean-up event flyer was developed and distributed to LHA renters and homeowners and to tribal residents. The flyer was also published in the March and April *Squol Quol* (monthly Reservation newspaper), posted around LIBC departments, and distributed during an April 2011 Community Breakfast.

Sanitary Services Company Inc. began dropping off the solid waste disposal containers on Monday, April 11, 2011. The LHA temporary laborers were present to ensure that the containers were put in the proper places. Prior to the start of the community clean-up event LHA temporary laborers and maintenance staff removed and disposed of solid waste and tires at the four illegal dumpsites shown in Figure 1. On April 13th, all solid waste and recycling containers were at the Stommish Grounds and the Planning Department. The LHA temporary laborers staffed the Stommish Grounds and Planning Department facilities from 8 am to 5 pm over the April 13 through 17 period to assist community members with disposal of solid waste and to ensure that metals, tires, and refrigerators were disposed of in the proper containers or areas. Once a container appeared to be full, a backhoe with a compactor attached would compact the waste and/or metal so that the containers were completely full before they were transported off-site for disposal. Christina Solomon (LHA) contacted SSC or Northwest Recycling on an as needed basis for the container removal and disposal at the Recycling and Disposal Services (RDS) transfer station located along Slater Road (approximately 2 miles from the northeastern corner of the Reservation) and the Northwest Recycling facility in Bellingham.

Also during this time period two teams of LHA staff took trucks and trailers to individual homes that requested assistance in removing household waste, tires, washers, dryers, refrigerators, and large furniture. Solid waste collected from individual homes was brought directly to the RDS transfer station for disposal.

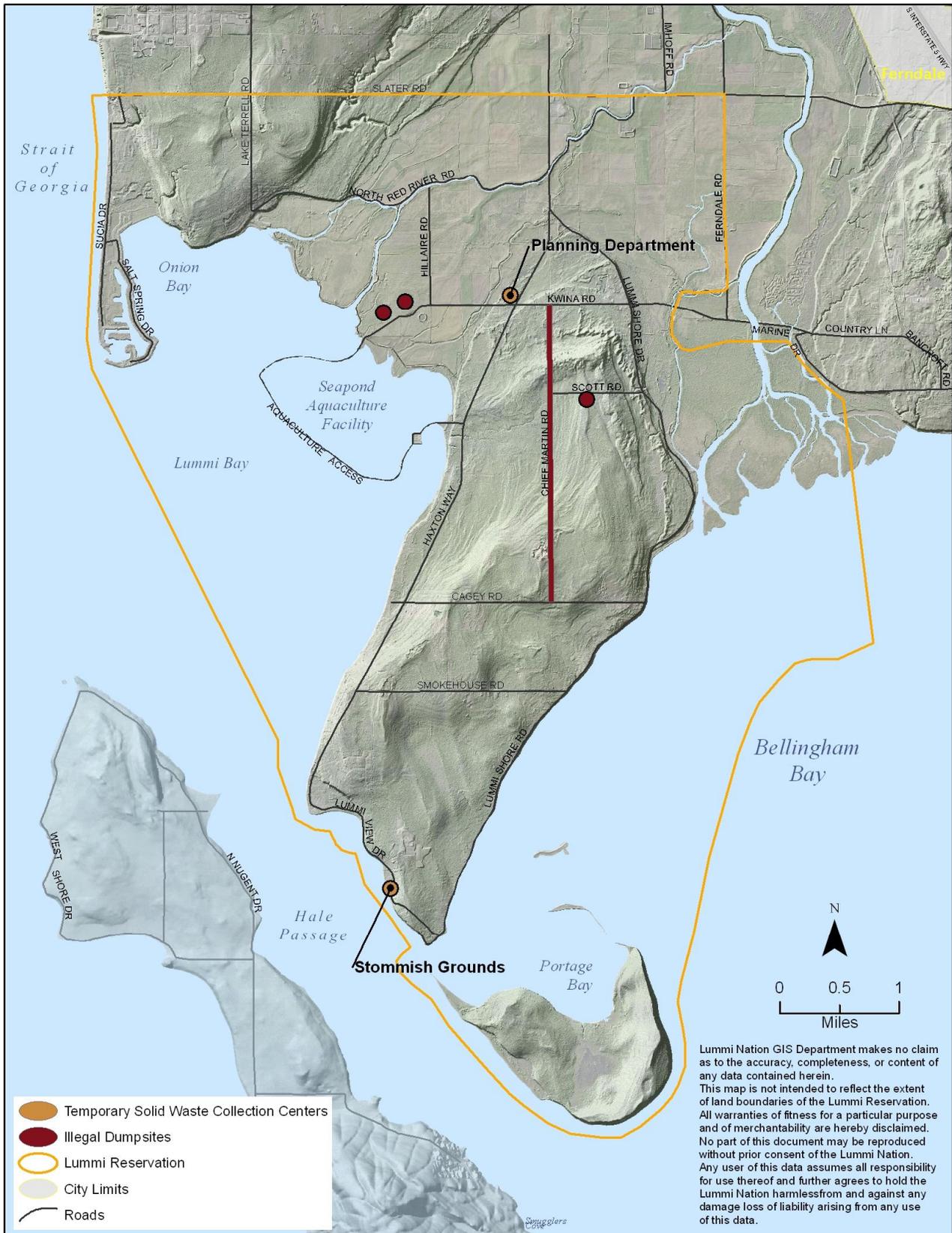


Figure 1. Location of the Solid Waste Collection Centers and Illegal Dumpsites during 2011

**2011 Community Clean Up
Lummi Housing Authority and Lummi Natural
Resources Department**



**April 13th through 17th
Open 8 am to 5 pm daily**



STOMMISH GROUNDS & PLANNING DEPARTMENT

17 Garbage Dumpsters
3 Metal Recycling

3 Garbage Dumpsters
1 Metal Recycling

REMOTE SITES

Assistance in transporting large approved items and large quantities of bagged garbage will be available. Please Contact Lummi Housing **before April 14th** for assistance transporting or garbage bags at **360-312-8407**

**NO HOUSEHOLD HAZARDOUS WASTE WILL BE
ACCEPTED**

THE FOLLOWING WASTES **WILL NOT** BE ACCEPTED
**MOTOR OIL, AUTOMOBILES, ANTIFREEZE, PESTICIDES,
HERBICIDES, LIGHT BULBS, CLEANING PRODUCTS, AND PAINT
CANS**

**All Lawn Mowers and Motors need to be drained of oil and gas
before coming to the dump.**

NO EXCEPTIONS!!!

Figure 2. 2011 Community Clean-Up Flyer

The 2011 Community Clean-up event was the largest single clean-up event conducted on the Reservation. A total of 24 dumpsters were filled with solid waste and 97 households were assisted by the remote pick-up. Approximately 270 tons of solid waste were removed, which was nearly twice the 148 tons removed during the 2009 Community Clean-up event. Over 900 tires were removed and more than 9 tons of metal were recycled, including appliances. Table 2, shows the total amount of solid waste, yard waste, wood waste, tires, washer/dryers, and refrigerators plus the tonnage of metal recycled from the remote sites, the two collection centers, and the four illegal dumpsites during the 2009 and the 2011 Community Clean-up event. Figure 3 through Figure 22 show representative photographs of the temporary Community Solid Waste Collection Center at the Stommish Grounds and at the Planning Department site, remote households, and the illegal dumpsites. Additional photographs are available on file.

Table 2. Summary of Solid Wastes Disposal and Recycling from the November 2009 and the April 2011 Community Clean-up Events

Solid Waste Category	2009	2011
Mixed Household Waste/Garbage	147.91 Tons	264.65 Tons
Tires	506 Units	924 Tires
Wood ¹		0.77 Tons
Yard Waste ¹		3.7 Tons
Refrigerators	37 Units	2 Units
Washer/Dryers	4 Units	5 Units
Metal Recycled	19 Tons	9 Tons

¹ Yard waste and wood were not separately accounted for on the weight tickets from the transfer station during 2009

An EPA Performance Partnership Grant through the Lummi Natural Resources Department funded the monitoring staff wages and the solid waste removal and disposal fees. The LHA funded \$12,286 of their maintenance staff wages that assisted on the remote pick-up teams and solid waste removal at the illegal dumpsites. A pre-payment of \$20,000 was paid to SSC; the final solid waste removal cost was \$31,599. The total cost of the 2011 Community Clean-up Event was \$57,049. The cost of the 2011 Community Clean-up Event was over 1.5 times more expensive than the 2009 Community Clean-up Event (Table 1).

As part of the community education portion of this community clean-up event, the total cost and the quantities of collected household solid waste, tires, appliances, and metal recycled were published in the May issue of the Squol Quol. Pursuant to the approved work plan with the EPA, the Northwest Indian Fisheries Commission (NWIFC) was contacted and asked to develop an article about the event to share the results with other tribal governments. The article appears on Page 7 of the Summer 2011 edition of NWIFC News (http://files.nwifc.org/magazine/2011_2_summer_nwifc_magazine.pdf). In addition, a video developed by the NWIFC and an on-line article about the clean-up event can be accessed at: <http://nwifc.org/2011/06/lummi-nation-holds-community-cleanup/>.

In an effort to develop a more holistic approach to solid waste management, the Lummi Nation has drafted an integrated solid waste management plan. It is anticipated that the Lummi Nation Integrated Solid Waste Management Plan will be approved by the LIBC during 2011 and then implemented over the next 10 years. During the development of the integrated solid

waste management plan the semi-annual (two times each year) community clean-up events were identified as an effective way to discourage and clean-up illegal dumping and provide community outreach and education on solid waste management on the Reservation. It was also determined after both the 2009 and 2011 Community Clean-up events that the Lummi Nation should examine the cost of purchasing a tire shredder. It cost \$4,620 to properly dispose of all the used tires collected during the 2011 Community Clean-up event. Also observed was the need for increased recycling opportunities at community clean-up events and other community events (i.e., Stommish Water Festival, Kwina Mile, Noon Fitness Walk, and First Salmon Ceremony). The draft integrated solid waste management plan also identifies subsidizing weekly solid waste collection for community members to help prevent accumulation of household waste.



Figure 3. Community Solid Waste Center Entrance Sign



Figure 4. Full Dumpsters at the Planning Department on April 16, 2011



Figure 5. Tires Collected at the Stommish Grounds



Figure 6. Latex Paint Collected to be Properly Disposed



Figure 7. Lummi Housing Authority Temporary Workers Assisting Community Members Dispose of Household Waste



Figure 8. Remote Pick-up Teams Assisting a Resident with Solid Waste Removal



Figure 9. Solid Waste on a Property Before the Clean-up Event



Figure 10. Property After the Community Clean-up Event



Figure 11. The LHA Temporary Labors Filling Trailer with Household Waste to be Disposed at RDS



Figure 12. Compacting a Full Metal Recycling Container



Figure 13. Solid Waste on a Property Before the Clean-up Event



Figure 14. Property After Solid Waste Removal



Figure 15. Bulk Solid Waste Items Before the Community Clean-up.



Figure 16. Household After the Solid Waste Bulk Items were Removed



Figure 17. Solid Waste to be Collected by a LHA Remote Pick-up Team



Figure 18. Clean Yard After Solid Waste Collected by LHA Remote Pick-up Team

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Figure 19. Illegal Dumpsite Along Chief Martin Road



Figure 20. Illegal Dumpsite Along Chief Martin Road Cleaned-up by LHA Staff



Figure 21. Illegal Dumpsite in the Lummi River Delta



Figure 22. Cleaned Illegal Dumpsite in the Lummi River Delta