

AGENDA

- 10:00 **Welcome & Introductions - Mike**
- 10:05 **Review & Comment on Meeting materials - Mike**
- minutes from 7/17 meeting
- Guiding Principles
- Education & Outreach Goals & Objectives
- 10:20 **Waste Collection - Gerald & Mark**
- Goals & Objectives
- HHW
- SQG
- Used Oil
- Discussion
- 11:55 **Adjourn**



Waste Collection Goals

1. Protect ground water, surface water, soils, sediments, and private property from hazardous waste contamination.
2. Increase the percentage of hazardous waste collected (that cannot be prevented through waste reduction in the first place).
3. Reduce the amount of hazardous waste that is improperly stored, improperly disposed, and accidentally spilled into the environment.



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Waste Collection Goals

4. Reduce chemical exposures to individuals and workers involved in solid waste, sewage treatment, or fire fighting.
5. Reduce damage to solid waste handling facilities, sewage treatment plants, on-site septic systems, and storm water treatment facilities by properly disposing of hazardous waste.
6. Reduce potential for causing publicly owned waste management facilities such as the landfill and sewage treatment plants to exceed pollutant discharge limits.



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Waste Collection Objectives

1. Continue operating the hazardous waste collection facility for homeowners and eligible small businesses. Assess how to more efficiently run the facility and reduce long term costs.
2. Continue operating the used-oil collection site network.
3. Assess barriers to customer participation in the waste collection services and carry out steps to overcome these barriers.



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Waste Collection Objectives

4. Assess unmet needs for waste collection services, then recommend and carry out options for meeting these needs. This may include assessing how far people are willing to travel to recycle used oil or safely dispose of household hazardous waste.
5. Operate a household hazardous product exchange.
6. Prepare an emergency disaster plan for assessing potential public health problems associated with disasters, collecting hazardous waste, responding to incidents of contamination, and determining how emergency response services will be funded.



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Thurston County Population

	2000	2005	2006	2007	% Change 00 - 07
Cities	93,294	97,650	99,300	102,390	9.75%
UGA	47,401	53,210	55,060	56,350	18.88%
Unicorp.	58,850	66,027	76,110	78,620	33.59%
Reservations	633	615	635	645	1.90%
Total	199,545	216,887	230,470	237,360	18.95%

Source: Thurston Regional Planning Council



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Household Hazardous Waste Collection

						% Change 03 - 07
	03	04	05	06	07	
Residents	9,279	9,629	9,668	10,809	14,810	60%
Tons	347	302	384	279	358	3%



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Fixed Collection HHW wastes* by Type & Volume

	2005	2006	2007	End Use/Disposal
Latex	91,039	150,436	125,834	Recycle
Oil Based	87,999	118,875	242,850	Incineration
Toxic Liquid	29,134	30,034	34,500	Incineration
Toxic Solid	13,391	13,398	17,462	Incineration
Aerosols	13,350	13,262	24,650	Recycle
A Fuel	45,440	51,668	47,259	Incineration
Bases	13,163	9,651	11,734	Incineration
Acids	12,992	8,143	9,491	Incineration
Batteries (auto)	80,220	104,790	78,280	Recycle
Batteries (other)	5,548	5,793	6,834	Recycle
Mercury	220	330	400	Recycle
Antifreeze	21,929	28,880	31,160	Recycle
Oil Filters	21,180	50,960	54,600	Recycle
Oil - Non Contaminated	216,265	196,840	211,455	Recycle
Oil - Contaminated	2,920	0	0	Incineration
Fluorescent Tubes (LF)	5,531	5,910	18,070	Recycle

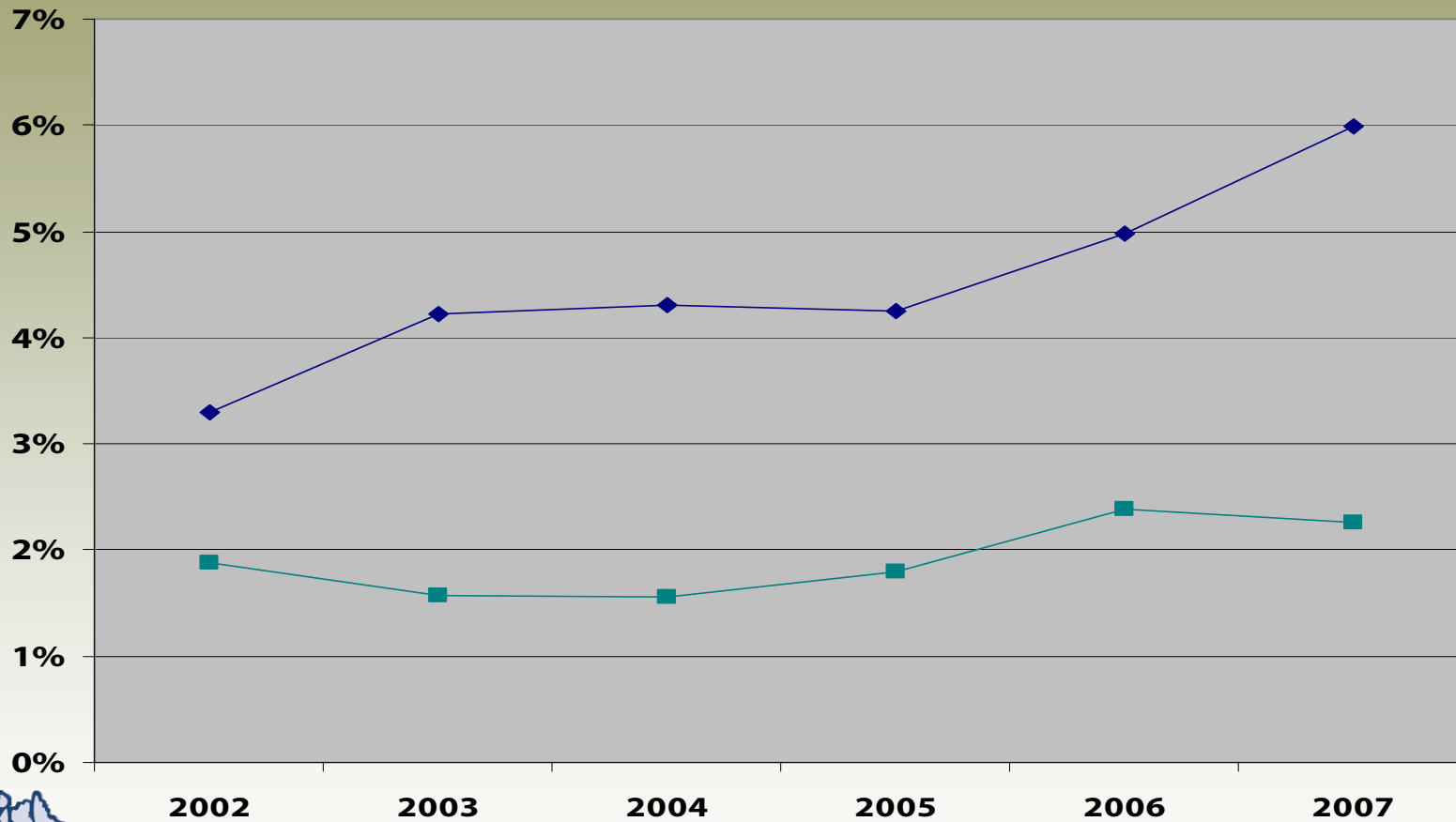
* Does not include all waste streams



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Residential Customers as Percentage of Population vs. Population Change



THURSTON COUNTY
WASHINGTON
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◆ % of Population

■ Population Change

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HazoHouse Costs 2005 - 2007

	2005	2006	2007
Employee	\$193,774	\$149,919	\$165,259
Contractor	\$331,460	\$449,287	\$489,540
Other	\$47,531	\$56,729	\$66,204
Total	\$572,765	\$655,935	\$721,003



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WasteMobile HHW Collection Events

- Typically events are held in Spring and Fall of each year
- Past efforts have focused Fall events in urban areas & Spring events in rural areas.
- Recently, we have split rural events over the course of a weekend to provide greater level of service.
- Funding levels may require transition to one event per year.



WasteMobile HHW wastes by Type and Volume

	2005	2006	2007
Latex	4,800	21,780	23,283
Oil Based	9,000	10,270	18,435
Toxic Liquid	4,000	2,800	8,650
Toxic Solid	2,200	2,650	3,850
Aerosols	970	3,220	2,175
A Fuel	2,650	2,200	3,380
Bases	450	1,325	875
Acids	245	925	595
Batteries (auto)	9,575	8,100	6,566
Batteries (other)	80	30	580
Mercury	0	0	1
Motor Oil	8,800	7,782	7,413
Fluorescent Tubes (LF)	6,216	4,468	4,937
Number of Events	2	2	3
Customers	945	1,190	1,390
Total Tons	22.9	35.5	39.3
Ave. Pounds/Person	48.47	59.66	56.55



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WasteMobile Costs

	Customers	Tons	Disposal Costs	Staff Costs	Total	\$/Vehicle	\$/Pound
2006 (Tumwater)	1105	30.7	\$38,118	\$11,600	\$49,718	\$44.99	\$0.81
2007 (Tumwater)	695	23.9	\$21,626	\$7,685	\$29,311	\$42.17	\$0.61



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Business Waste Collection

- Large Quantity Generator (LQG) – produce greater than 2,200 lbs of dangerous waste per calendar month, or greater than 2.2 lbs of acutely hazardous waste per month.
- Medium Quantity Generator (MQG) – produce greater than 220 lbs per but less than 2,200 lbs per calendar month, and do not accumulate more than the upper limit on-site.



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Business Waste Collection

- Small Quantity Generator (SQG or CESQG) – produce less than 220 lbs of dangerous waste per calendar month.
- XQG – Generators that have EPA ID numbers but report that they do not generate any hazardous waste.



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Business Waste Collection

- In Thurston County there are:
 - 9 LQGs
 - 21 MQGs
 - 53 SQGs
 - 36 XQGs
- 229 businesses are registered users of HazoHouse (SQGs)



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Hours of Operation: Friday - Sunday, 8:00 am - 5:00 pm

Charge Account Contract Registration Form

Please print required information in space provided below

Business Name	Type of Business		
Business Address	City	ST	Zip
Mailing Address (if different than business address)	City	ST	Zip
Contact Name (for follow up billing questions)	Phone		
SQG Number	Fax		

Certification

According to Washington state law, Chapter 173-303 Washington Administrative Code, a small quantity generator is a business, institution or government office that generates less than 220 pounds of hazardous waste per month or batch, and less than 2.2 pounds of acute hazardous waste per month. Small quantity generators may accumulate or store no more than 2,200 pounds of hazardous waste on site at any time. Based on state law and the facility operating permit, HazoHouse can only accept wastes from small quantity generators.

I certify that my organization is a small quantity generator as defined by Chapter 173-303 (070) WAC. I understand that I must complete this registration form in order to deliver hazardous waste to HazoHouse. I certify under penalty of perjury under the laws of the state of Washington that the foregoing statement is true and correct.

Charge Account Contract

The undersigned agrees to pay all fees associated with the disposal of hazardous waste brought to HazoHouse. The undersigned is liable for payment within 15 working days from the date of the invoice by the Thurston County Department of Water and Waste Management.

The undersigned further agrees to pay all costs associated with any effort or action needed to collect payment of a past due account which require the services of a collection agency, attorney, or other judicial action. The undersigned also agrees that the County may refuse to extend services to any customer with an invoice 30 days past due.

The undersigned agrees that fees are subject to change.

Signature of Owner/Operator or Manager	Date
Name (Please Print)	Title



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HAZARDOUS WASTE DISPOSAL RATES For Small Quantity Generators

Type of Waste	Cost per Unit
Acids	\$1.19/lb.
Antifreeze	\$0.09/lb.
Bases	\$1.22/lb.
Batteries	
Nickel-Cadmium	\$1.32/lb.
Mercury	\$3.50/lb.
Lithium	\$2.25/lb.
Lead Acid	No charge
CRTs (TVs and Monitors)*	See below
Dental Amalgam Scraps (disinfected)	\$1.58/lb.
Flammable Acids	\$2.19/lb.
Flammable Bases	\$2.26/lb.
Flammable Gases (other than propane)	\$1.36/lb.
Flammable Liquids/Fuels (gasoline, misc. flammable liquids)	\$0.28/lb.
Flammable Solids	\$7.75/lb.
5 Gallon Drum	\$80/drum
Fluorescent Bulbs	
Fluorescent Tubes	\$0.12/ft.
Compact Fluorescent Lamps	\$1.20 ea.
HID Lamps <3"	\$2.50 ea.
HID Lamps >3"	\$3.00 ea.
4' Storage Cartons	\$4.75 ea.
8' Storage Cartons	\$9.50 ea.
Non-Regulated Materials	\$0.26/lb.
Oxidizers	\$2.10/lb.
Paint-Related Materials	\$0.77/lb.
Petroleum-Contaminated Soils	\$0.26/lb.
Propane Tanks - 1 to 5 Gallon Gas Grill-Sized	No charge
Toxic Liquids	\$1.53/lb.
Toxic Solids	\$1.58/lb.
Used Oil	No charge
Used Oil - Contaminated	\$0.30/lb.
Used Oil Filters	\$0.90/lb.
Water Contaminated with Oil	\$0.18/lb.
Overpack Drum - 85 Gallon Metal	\$60.00
Overpack Drum - 95 Gallon Plastic	\$200.00
Overpack Drum - 55 Gallon Metal	\$23.00
Overpack Drum - 55 Gallon Plastic	\$70.00
X-Ray and Photo Fixer (used, containing silver)	No charge

* CRTs are not accepted at HazoHouse. CRTs can be taken to the transfer station and disposed of for a \$5.00 fee, plus the unbagged garbage rate.

Note: SQG hazardous waste disposal fees were established in 2003 under TC Resolution 13010, which updated Thurston County Code Section 8.12.030.

Business Waste Collection

	03	04	05	06	07	% Change 03 - 07
Businesses	35	100	102	138	151	331%
Tons	13.9	19.1	20.9	13.5	11.6	-17%



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Used Oil Collection In Thurston County, WA

*Program Status from 2002 Used
Oil Collection Plan to Present*



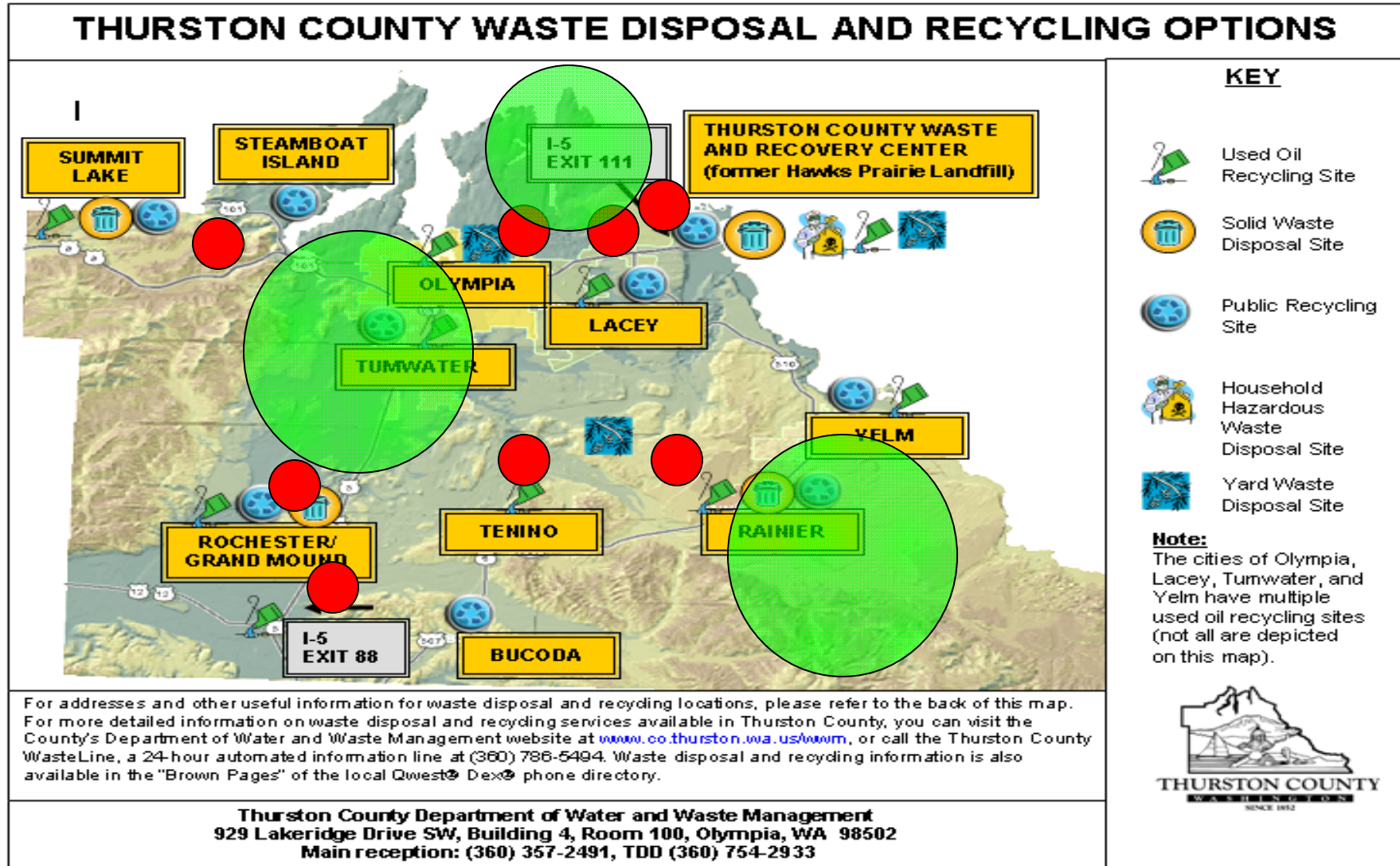
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Current oil recycling site



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Used Oil Recycling Locations



Used Oil Overview

- Used Oil Collection Goals
 - As defined in 2002 Used Oil Plan Update
- Used Oil Collection Data (1993-present)
- Current Program Status and Outlook



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2002 Used Oil Collection Goals

- Goal 1 – Collect at least 80% of DIY used oil in Thurston County
 - ✘ We're not there at this time
 - ✘ 1993 Ecology current per capita generation rate
- Goal 2 – Maximize re-refining of collected DIY used oil and purchase of re-refined oil products
 - ✔ We have made progress in this area.
 - ✔ 95.3% of used oil collected in 2007 was re-refined.
 - ✔ Continuing challenges promoting use of re-refined oils
 - ✔ Anecdotal successes within jurisdictions



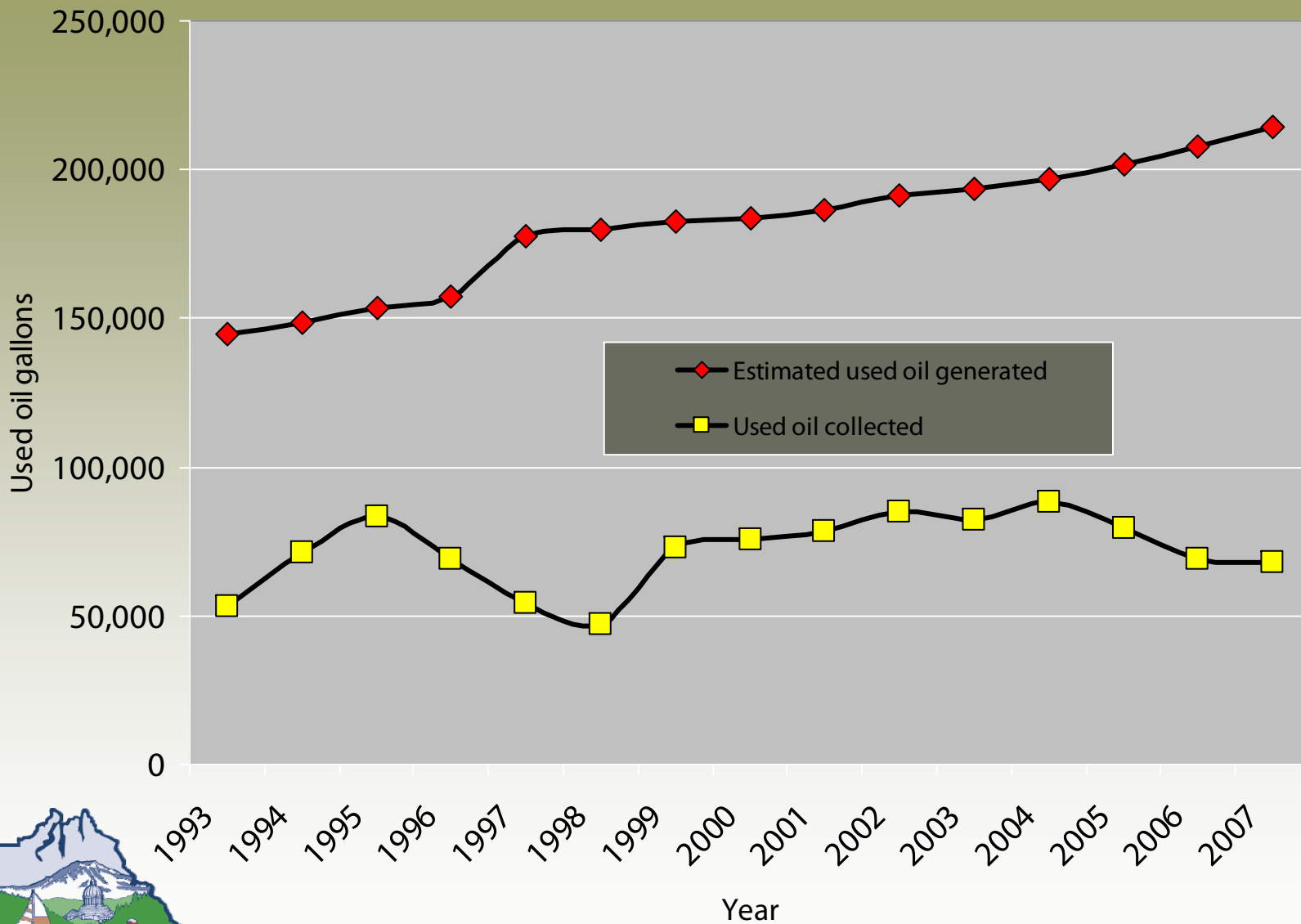
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Used Oil Collection Volumes – 1993 to present

Year	Population	Estimated Gallons*	80% of Estimated Gallons	Actual Gallons	% Collection Rate	% Collected of the 80% Goal
2007	238,000	214,200	171,360	68,069	32	39.7
2006	231,100	207,990	166,392	68,879	33	41
2005	224,100	201,690	161,352	79,376	39.4	49.2
2004	218,500	196,650	157,320	88,519	45	56.2
2003	214,800	193,320	154,656	82,040	42.4	53
2002	212,300	191,070	152,856	84,763	44.4	55.4
2001	207,355	186,620	149,296	78,353	42	52.5
2000	204,300	183,870	147,096	75,696	41.2	51.1
1999	202,700	182,430	145,944	72,821	39.9	49.9
1998	199,700	179,730	143,784	47,102	26.2	32.8
1997	197,600	177,840	142,272	54,123	30.4	38
1996	174,960	157,464	125,971	68,971	43.8	54.7
1995	170,280	153,252	122,601	83,281	54.3	67.9
1994	165,150	148,635	118,908	71,243	47.9	59.9
1993	160,920	144,828	115,862	53,275	36.7	46

1993-2007 Used oil trends



Used Oil Program Status and Direction

- 2007-2009 grant funding - \$30,801 {CPG from Ecology with local match} ~ 0.2 FTE per year
- Requested additional funds in 2009 CPG offset cycle for new tank siting and signage updates for all tanks
- Challenges –
 - 🙄 Loss of sites
 - 🙄 Difficulty establishing new locations – a hard sell...
 - 🙄 “Antiquated” generation rate numbers



Current and prospective projects

- Used cooking oil management
- Recycling opportunities for plastics contaminated with petroleum residues
- Professional survey to produce a better Thurston County generation rate



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