The background of the slide features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the left and right sides of the slide, framing the central text area.

OSS Plan Advisory Committee: March 13, 2014

Part 5 - Education

Meeting objectives

- ▶ Review Thurston County's current O&M and OSS education program
- ▶ Discuss what a comprehensive education program should include

What to keep?

What to add?

What to discontinue?

Education goals:

- ▶ Program that protects public health
- ▶ Program that protects ground and surface water resources
- ▶ Program that protects owner's investment
- ▶ Education that gets to the user
- ▶ ...
- ▶ ...
- ▶ ...

Education element includes:

- ▶ Owner responsibility
- ▶ OSS information
- ▶ Reminders and encouragement to maintain
- ▶ Funding mechanism

Education 'vehicles' include:



- ▶ Permits - new OSS, repair OSS, time of transfer
- ▶ Operational certificates
- ▶ Classes
- ▶ Websites
- ▶ Brochures
- ▶ Newspaper articles
- ▶ Public service 'announcements'

What exists now...

Summary of Findings

- ❖ Current O&M program
- ❖ Questionnaires
- ❖ Puget Sound counties

Thurston County OSS Stats

Henderson 5928 parcels		Nisqually 3781 parcels		County Required OPCs		Known OSS with No Special O&M Req'd'	Unknown OSS
Systems	6510	Systems	4195	Systems	2943	24,782	31,570
Total # of Systems in O&M programs: 13,648 Estimated total # OSS in County: 70,000						56,352 = 80% of OSS	

Need to
Inventory



TABLE 3

Number of 'New System Approvals'

Inventory

Year	Henderson	Nisqually	County Required	County Other Recommendations when installed
2007	0	#N/A	0	609
2008	2	#N/A	0	412
2009	4	#N/A	0	242
2010	9	#N/A	0	250
2011	67	#N/A	64	207
2012	58	5	75	150
Total	140		139	1870

TABLE 4

Time of Transfer Applicants



Year	Henderson	Nisqually	County Required	County Other
2010	34	#N/A	22	239
2011	124	#N/A	78	929
2012	173	100	98	985
Total	331	100	198	2153

Inventory
opportunity

Finding failures

TABLE 5

Operational Certificate Renewal Notices



Year	Henderson	Nisqually	County Required
2007	2016	#N/A	1164
2008	2060	#N/A	1089
2009	2379	#N/A	1026
2010	1854	#N/A	1053
2011	1946	#N/A	1020
2012	2043	*1424	894 ♦

*Nisqually has approximately 1424 notices sent annually.

♦ In 2011 the Washington State Department took over management of all OSS that were designed for flows greater than 3,500 gallons per day. That resulted in a reduction of 100+ *County Req'd* certificates.

TABLE 11

Septic Tank Pump Reports Submitted

* Time of Transfer number is a subset of 'County other'

Year	Henderson	Percent of notices sent	County Req'd	County Other	Time of Transfer*
2007	1294	64%	452	89	
2008	1513	73%	554	121	
2009	1667	71%	565	249	
2010	894	48%	552	1285	76
2011	944	49%	581	2346	370
2012	880	43%	447	2336	383



Inventory opportunity

Year	Henderson	Nisqually	County Req'd
2007	8	N/A	94
2008	8	N/A	91
2009	17	N/A	128
2010	18	N/A	104
2011	30	N/A	172
2012	86	25	171

TABLE 12

Monitoring Reports Submitted

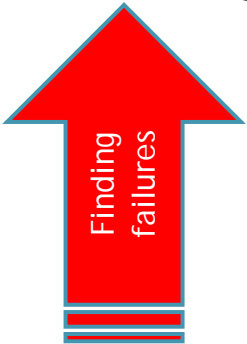


TABLE 13

Compliance Status of Monitored Systems

Area	In Compliance	Non-conforming	Total
Henderson MRA	98	7	105
Nisqually MRA	44	1	45
County	212	42	254

TABLE 14

Finding failures

Number of Henderson MRA Failed Dye Tests

Year	Number of Tests	Number of Failed Tests in Henderson	Failed dye test percentage
2007	21	3	14%
2008	38	5	13%
2009	45	3	7%
2010	50	1	2%
2011	51	2	4%
2012	53	1	2%

TABLE 15

OSS Repairs Permits



	Henderson			County		
Year	Issued	Installed	% installed	Issued	Installed	% installed
2007	26	24	92%	81	70	86%
2008	21	16	76%	86	78	91%
2009	28	25	89%	84	76	90%
2010	19	17	89%	83	75	90%
2011	21	20	95%	86	80	93%
2012	17	14	82%	50	42	84%
Total	132 / 2%			470 / .8%		

TABLE 16

Permitted Tank Replacements



Finding
failures

	Henderson		County	
Year	Issued	Installed	Issued	Installed
2007	26	24	42	38
2008	15	11	28	23
2009	24	22	19	13
2010	5	5	27	21
2011	5	5	17	15
2012	9	9	11	8

TABLE 17

Numbers of Sand filter / Mound OSS and Replacement Permits

2007 - 2012

	Henderson	County
System type	Total number of systems	
Sand filter only	118	1015
Mound only	199	1023
Sand filter/mound	82	205
Total	399	2243

Year	Rebuild / Replace Permits			
	Issued	Installed	Issued	Installed
2007	1	1	12	11
2008	1	1	8	7
2009	5	4	4	4
2010	0	0	8	7
2011	2	2	15	13
2012	2	2	11	8
Total	11	10	58	50



Finding failures

Days from Repair Permit to Installation

293 OSS: 2003 - 2013

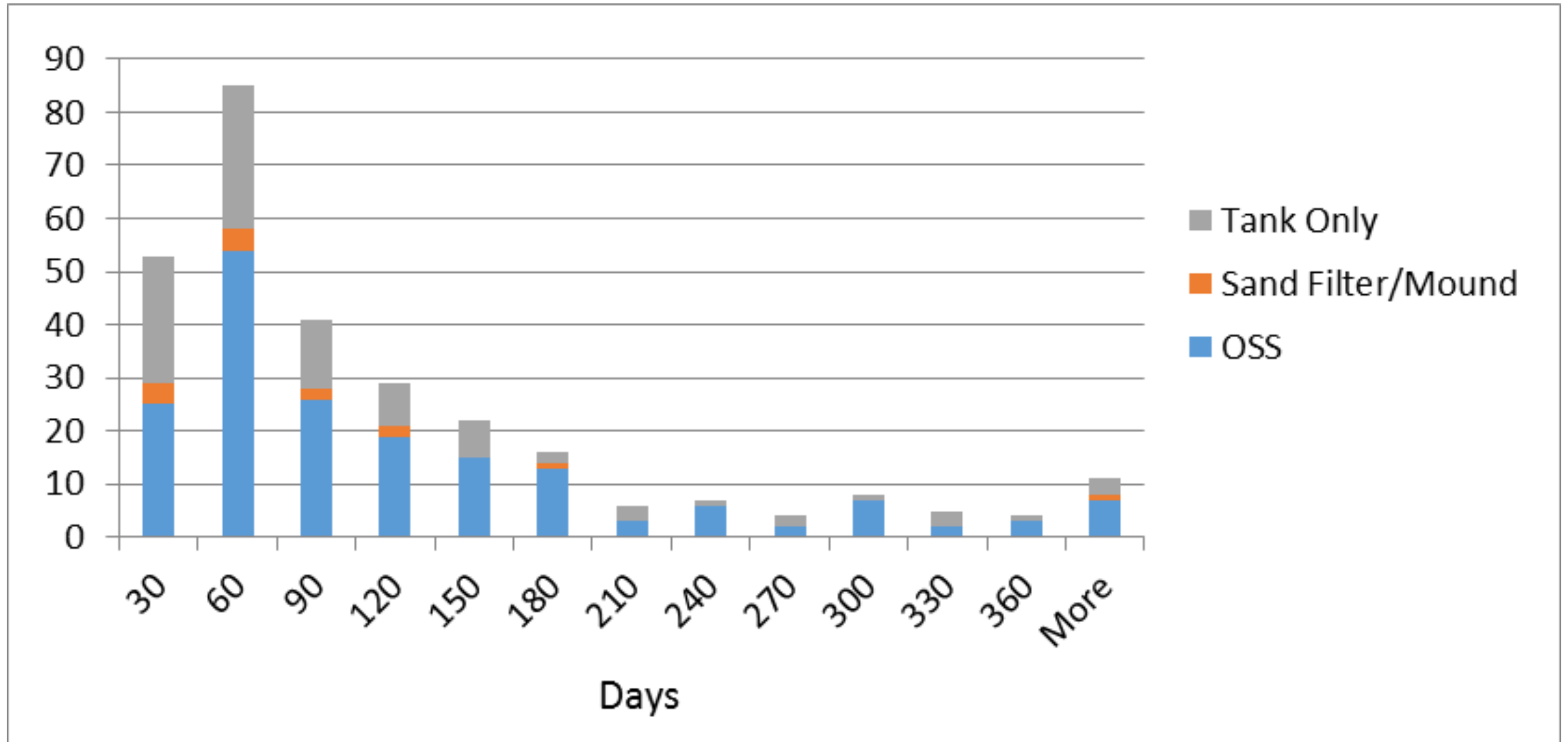


TABLE 18

Minor Repairs

Year	Henderson
2007	# N/A
2008	# N/ A
2009	431
2010	194
2011	184
2012	159



Riser Rebates Awarded

	Henderson SPD			Nisqually SPD		
Year	# of Risers	\$ in Rebates	# of OSS	# of Risers	\$ in Rebates	# of OSS
2007	254	\$12,700.00	154	4	\$200.00	2
2008	372	\$18,600.00	217	4	\$200.00	3
2009	377	\$18,850.00	244	9	\$450.00	5
2010	167	\$8,350.00	98	4	\$200.00	2
2011	140	\$7,000.00	83	38	\$1,900.00	21
2012	117	\$5,850.00	77	44	\$2,200.00	23
TOTAL	1427	\$71,350.00	873	103	\$5,150.00	56



Small O&M Grants

	Henderson SPD		Nisqually SPD	
Year	# Grants Approved	\$ Granted	# Grants Approved	\$ Granted
2007	16	\$4,594.29	2	\$759.50
2008	26	\$8,408.84	0	\$0.00
2009	25	\$8,182.21	0	\$0.00
2010	20	\$6,855.89	1	\$500.00
2011	22	\$6,035.89	2	\$612.53
2012	26	\$6,283.10	1	\$420.40
TOTAL	135	\$40,360.22	6	\$2,292.43

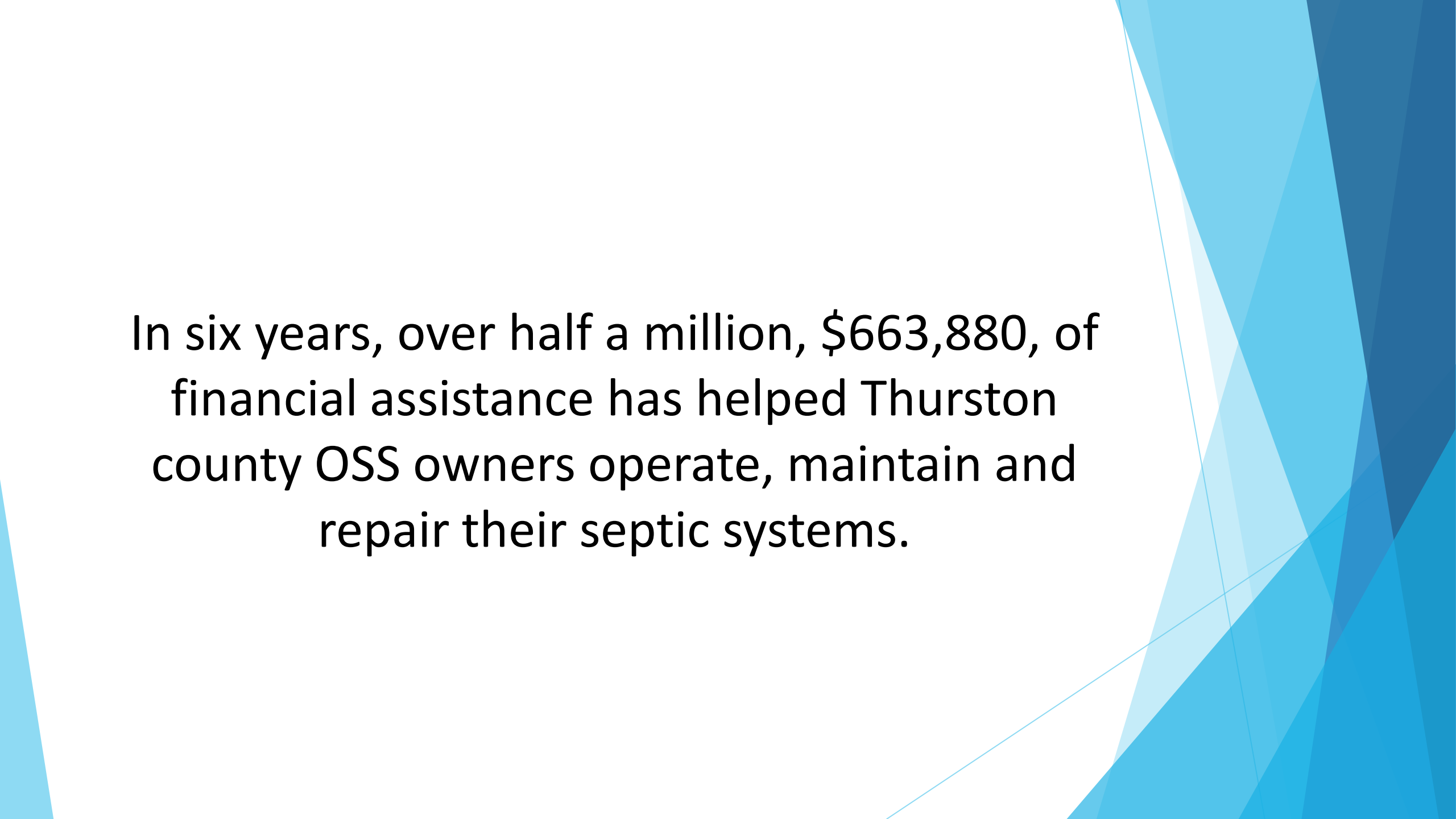
Repair Grants

	Henderson		Nisqually		County		Grants: All Areas	
Year	# of Grants	Amount	# of Grants	Amount	# of Grants	Amount	# of Grants	Amount
2007	0	0	0	0	1	\$3000	1	\$3000
2008	0	0	0	0	1	\$2800	1	\$2800
2009	6	\$19,655.33	1	\$3750.00	5	\$18,619.82	12	\$42,025.15
2010	2	\$6750	0	0	5	\$21,500	7	\$28,250
2011	6	\$15,250	0	0	8	\$41,750	14	\$57,000
2012	1	\$2250	0	0	1	\$6500	2	\$8750
TOTAL	15	\$43,905.33	1	\$3750.00	21	\$94,169.82	37	\$141,825.15



Repair Loans

	Henderson		Nisqually		County		Loans: All Areas	
Year	# of Loans	Amount of Loans	# of Loans	Amount of Loans	# of Loans	Amount of Loans	# of Loans	Amount of Loans
2007	0	0	1	\$14,752.39	2	\$32,315.07	3	\$47,067.46
2008	3	\$47,932.73	0	0	3	\$33,584.76	6	\$81,517.49
2009	0	0	1	\$7,280.39	5	\$56,489.18	6	\$63,769.57
2010	2	\$21,831.09	0	0	1	\$19,480.47	3	\$41,311.56
2011	2	\$26,359.97	0	0	8	\$117,607.41	10	\$143,967.38
2012	2	\$25,268.67	0	0	0	0	2	\$25,268.67
TOTAL	9	\$121,392.46	2	\$22,032.78	19	259,476.89	30	\$402,902.13

The background of the slide features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side and bottom of the frame, creating a modern, dynamic feel.

In six years, over half a million, \$663,880, of financial assistance has helped Thurston county OSS owners operate, maintain and repair their septic systems.

TABLE 23

Number of OSS in Compliance and Non-conforming

*More components than systems due primarily to additional septic tanks.

	Henderson		Nisqually		County Required	
	Systems	Components*	Systems	Components*	Systems	Components*
In Compliance	5483 84%	5601	4195	4274	2475 84%	2713
Non-conforming	1027 16%	1031	N/A	N/A	468 16%	489
Total	6510	6632	4195	4274	2943	3202

TABLE 24

Number of OSS Made Non-conforming and Number of OSS Reinstated

	Henderson		County		
Year	Made Non-Conforming	Reinstated	Made Non-Conforming	Reinstated	Reinstatements due to Time of Transfer
2007			67	37	
2008	1	1	50	24	
2009	80	28	37	14	
2010	565	184	55	26	
2011	273	75	280	118	11
2012	302	66	170	59	24
Total	1221	354 29%	659	278 42%	

TABLE 25


Number Attending 2-Hour Workshops



Year	Number of 2 hour workshops	Number attending
1998	5	208
1999	8	245
2000	6	186
2001	6	208
2002	7	174
2003	7	216
2004	8	211
2005	8	155
2006	8	243
2007	4	112+
2008	4	111
2011	2	N/A
Total	73	2039+

TABLE 26

Number Attending Homeowner Inspection Certification Training



Year	# of Workshops	Henderson		Nisqually	
		Registered	Attended	Registered	Attended
2007	42	603	554	#N/A	#N/A
2008	36	630	546	#N/A	#N/A
2009	37	607	507	#N/A	#N/A
2010	19	338	285	#N/A	#N/A
2011	12	238	209	#N/A	#N/A
2012	15	224	194	124	107
Total	161		2295		



Class questionnaire responses ...

- ▶ 1. Had you been doing your own septic system inspections before attending the class?
Yes: 14 (20%) **No: 54 (77%)** No answer: 2 (3%)
- ▶ 2. How helpful was the 5-hour homeowner septic system training?
Very helpful: 65 (93%) Somewhat helpful: 5 (7%)
Knew everything before: 0 Waste of time: 0
- ▶ 3. Did you conduct your own inspection of your septic system after attending the class?
Yes: 65 (93%) No: 5 (7%)

- ▶ 4. Were you confident doing your own inspection?

Easy to do the inspection: 58 (83%) Had some problems: 11 (16%)

Wouldn't do it again: 1

- ▶ 5. Did you need help doing the inspection?

No: 57 (81%) Yes: 13 (19%)

Had to call the county: 3 Had to hire a pumper: 5

- ▶ 6. Did your septic tank need pumping?

Yes: 21 (30%) **No: 49 (70%)**

- ▶ 7. Did you conduct your own inspection when your renewal notice came in 2010, 2011 or 2012?

Yes: 66 (94%) No: 4 (6%)

- ▶ 8. Did you still remember how to do the inspection?

Yes: 62 (88%) No: 8 (12%) Forgot everything: 0
Had to call the county: 1 Had to hire a pumper: 2

- ▶ 9. Have you recommended the training to your neighbors?

Yes: 56 (80%) No: 12 (17%) No answer: 2

- ▶ 10. Would a refresher be helpful? If so, what kind of format would be best for you?

No: 23 (33%) **Yes: 47 (67%)**

Classroom/septic park: 12

Online tutorial: 26

'How To' brochure: 19

- ▶ 11. Should the county continue to offer the training?

Yes: 68 (97%) No answer: 2

A few of the pumper questionnaire responses ...

- People are surprised / alarmed that their tank is full
- Need something better than a sock for measuring - have trouble measuring the bottom sludge
- Wipes are becoming a serious problem – they are not flushable as it says on the package

My observations talking with pumpers:

- Pumpers view their 'service role' differently: strictly business vs educator
- One pumper asks if the owners live in an MRA and encourages homeowners to take the 5 ½ hour training
- Most pumpers have an inspection only option
- Many pumpers have a 'clientele' of loyal customers
- Some pumpers focus on time of transfer service

What are Puget Sound counties doing?

- ▶ The majority of counties have some program in place.
- ▶ The programs that have the highest rates of compliance are those within a Marine Recovery Area or sensitive area.
- ▶ All counties except Kitsap County place the responsibility to routinely conduct septic system inspections on the property owner.
- ▶ Nine counties accept inspection reports conducted by homeowners.
- ▶ Whatcom County has led the way in adopting the 2012 legislation enabling charges on county property tax statements for implementing and funding on-site sewage management plans.
- ▶ Operation and management of OSS is not a one-time fix; it is an on-going, forever program.

Thurston County Issues:

- ▶ **Equity** ... not everyone has the same opportunities or pays the same rate
- ▶ **Incentives** ... how to get OSS owners to fulfill responsibility
- ▶ **Efficiency** ... how to prioritize efforts
- ▶ **Funding** ... how to fund a program

Thurston County program review ...

► Strengths ...

► Weaknesses ...

When does an OSS owner want to learn?

- ▶ Will an owner learn if the information isn't important to them?
- ▶ How to prioritize education efforts?

To meet the education goal,
what should a program include?

How can such a program
be made affordable?