

## 2013 MS4 Summary

### 2013 DOT&PF Central Region M&O Expenditure Summary:

Sweeping- \$1,119,629.33  
Storm Drain Inspections and Cleaning- \$451,771.00

Sand/Salt- \$219,317.28/\$101,645.00

#### Sand Storage Facilities

Design - \$776,000  
Anchorage Building Construction Expenses- \$21,000  
Birchwood Building Construction Expenses- \$0  
Girdwood Building Construction Expenses- \$2,228,341

#### MS4 Permit Administration and Compliance

Payment to the Municipality of Anchorage for Permit Implementation- \$340,000  
DOT&PF M&O Permit Administration Costs- \$26,490.87

#### GIS Mapping of State of Alaska Storm Drain System

Payment to the Municipality of Anchorage for GIS Mapping- \$160,000  
DOT&PF M&O GIS Mapping Costs - \$31,710.45

### Pg. 7 B 1. Construction Site Runoff Control Program

DOT&PF Central Region Maintenance and Operations did carry out construction projects exceeding 10,000 SF of land disturbance, none of which required SWPPP's, internal reviews or written approval.

### Pg. 17 e) (i) Inventory and Tracking

Municipality of Anchorage

### Pg. 21 b) Catch basin and inlet cleaning

DOT&PF did meet the intent of the permit. Central Region M&O contracted with Alaska Stormwater Maintenance Inc (ASM) to inspect all State owned storm drain manholes, catch basins and oil grit separators (OGS) within the Municipality of Anchorage. All oil grit separators inspected by ASM were cleaned, and all catch basins or manholes with less than 6 inches of capacity remaining between the bottom of the lowest outlet pipe and debris in the sump were cleaned. During the 2013 season there were 3328 inspections performed and 1288 structures cleaned based on the 6 inch capacity criteria. Additionally, 48 OGS were inspected and cleaned. There was approximately 424 cubic yards of material removed from the DOT&PF owned storm drain system.

### Pg. 22 (iii) Covered Sand and Salt Storage

The design for the covered sand and salt storage facilities located at East Tudor Road, Girdwood and Birchwood was completed in 2012. Construction of the Girdwood facility was completed this summer and is currently being utilized. Construction of the East Tudor Road facility began this summer, and is on

winter shutdown after some site preparation work was completed in the fall. A contract for construction of the Birchwood facility is anticipated to be awarded in January 2014.

**Pg. 22 d) Street and Road Sweeping**

DOT&PF has met the intent of the permit and has swept all regulated roads at the frequency required. DOT&PF has provided data to show the street/road names, times and dates swept, load counts and equipment packages used.

M&O did not use any pesticides or herbicides.

Two spills were recorded during 2013. The first was a spill of 3000 – 3500 gallons of Magnesium Chloride that occurred at the Girdwood Sand Storage facility. The cleanup for this spill is currently being coordinated with DEC. The second was a spill of 25 gallons of diesel fuel from a damaged State of Alaska piece of equipment at an Alyeska Resort parking lot. DOT&PF M&O responded and cleaned up the spill. Contaminated soil was transported to AIMM Technologies in Soldotna, Alaska for disposal.

**Pg. 23 g) Training**

- **2/25/13: 2013 Watershed Update/2013 APDES Annual Meeting:** Presented by MOA
- **2/25/13: Low Impact Development Workshop:** Presented by MOA
- **3/14/13: In House Asset Management:** Forester University Webinar
- **4/18/13: 2013 Environmental Expo:** Presented by DOT&PF
- **9/19/13: Illicit Discharge Detection and Elimination:** National Stormwater Center Webinar
- **11/14/13: Street Dirt; A Better Way of Measuring BMP Effectiveness:** Forester University Webinar
- **12/12/13: Commercial Inspections MS4 Workshop:** National Stormwater Center Webinar
- **Certified Erosion and Sediment Control Lead Training**

See attached attendee list.

**Pg. XX, SWPPP Documents**

- **Facility SWPPPs:** Birchwood, Girdwood and Anchorage have active SWPPPs that were put into place in July of 2013.
- **Snow Storage Sites:** Both DOT&PF snow storage sites have active SWPPPs.

FY2012 CAMP	TONS QUANTITY	SAND \$/PER	winter sand	TONS QUANTITY	SALT \$/PER	bulk salt
Anchorage	25004.06	\$11.99	\$299,798.68	1609.69	145.5	\$234,209.90
Birchwood	5979.53	\$8.99	\$53,755.97	402.91	145.5	\$58,623.41
Girdwood	8011.17	\$20.99	\$168,154.46	801.09	145.5	\$116,568.60
<b>TOTALS</b>	<b>38994.76</b>		<b>\$521,709.11</b>	<b>2813.69</b>		<b>\$409,391.90</b>

FY2013 CAMP	TONS QUANTITY	SAND \$/PER	winter sand	TONS QUANTITY	SALT \$/PER	bulk salt
Anchorage	25021.35	\$12.23	\$306,011.11	2008.6	149.14	\$299,562.60
Birchwood	5007.12	\$9.17	\$45,915.29	401.2	149.14	\$59,834.97
Girdwood	10005.98	\$21.41	\$214,228.03	1016.75	149.14	\$151,638.10
<b>TOTALS</b>	<b>40034.45</b>		<b>\$566,154.43</b>	<b>3426.55</b>		<b>\$511,035.67</b>

FY2014 CAMP	TONS QUANTITY	SAND \$/PER	winter sand	TONS QUANTITY	SALT \$/PER	bulk salt
Anchorage	0	\$0.00	\$0.00	400	145	\$58,000.00
Birchwood	0	\$0.00	\$0.00	0	0	\$0.00
Girdwood	10042	\$21.84	\$219,317.28	301	145	\$43,645.00
<b>TOTALS</b>	<b>10042</b>		<b>\$219,317.28</b>	<b>701</b>		<b>\$101,645.00</b>

Camp	Sand Used Winter 2012/2013 (Tons)	Salt Used Winter 2012/2013 (Tons)	Sand on Hand After 2012/2013 Winter Season (Tons)	Salt on Hand After 2012/2013 Winter Season (Tons)	Sand Ordered For 2013 / 2014 Winter Season (Tons)	Salt Ordered For 2013 / 2014 Winter Season (Tons)
Anchorage	16000	2008	20000	0	0	400
Birchwood	5000	401	5000	0	0	0
Girdwood	9000	1016	1000	0	10042	301

**2013 MS4 Summary for CBERRRSA**  
**11-15-2013**

**Costs incurred:**

Sweeping	- Spring	\$92,766.10	
	- Incidental	\$ 7,715.10	
	- Fall	\$ 64,171.56	
	<b>Total</b>	<b>\$164,652.76</b>	
Storm Drainage System and OGS Maintenance		<b>\$72,100.00</b>	
CCTV/GIS Storm Systems Inspections		<b>\$ 6,439.00</b>	
Sand / Salt Purchases		<b>\$154,000</b>	- Sand
		<b>\$ 0</b>	- Salt
<b><u>TOTAL</u></b>		<b>\$399,348.76</b>	

**Met/Did not meet intent:**

**Pg. 7 B 1. Construction Site Runoff Control Program – Met**

CBERRRSA's contractor had carry over project from 2012 that required SWPPP documentation, (See attached) project is now in winter shutdown with a projected completion in 2014. We met or exceeded the intent of the permit on this item.

**Pg. 17 e) (i) Inventory and Tracking**

Municipality of Anchorage's Watershed Management staff and Eagle River Street Maintenance Office Staff are utilizing ARC/GIS to reconfigure the ERSM drainage system and map the data base, looking to completely GIS/Map all our structures and storm drainage systems by February 1<sup>st</sup> 2014.

**Pg. 21 b) Catch Basin and Inlet Cleaning – Met**

- ERSM inspected 1025 Catch Basins, Manholes, and Catch Basin/Manholes in the CBERRRSA area in 2013
  - ERSM cleaned 1023. Catch Basins, Manholes, and Catch Basin/Manholes in the CBERRRSA area in 2013.
- CBERRRSA has increased our OGS structures ( See attached)
  - All eleven OGS structures were inspected and cleaned in 2013.
    - Five Structures are still under developers warranty and will be set on schedule for future years for cleaning but remains on subdivision warranty and is the responsibility of the developer for repairs beyond cleaning.

**Pg. 21 c) Street and Road Maintenance**

- CBERRRSA reviewed our area SOP's and has no changes to the area SOP's for 2013

**Pg. 21 c) (ii) Inventory of Street Maintenance Materials**

- See attached Sheet labeled CBERRRSA Material Inventory

**Pg 22 (iii) Covered Sand and Salt Storage**

- CBERRRSA has funding for the Hiland Sand Storage Facility and the Chugiak Storage Facility with construction slated for spring of 2013 for both facilities.

**Pg 22 d) Street and Road Sweeping – Met**

- CBERRRSA met the intent of the permit, all the roads were categorized based on the provided criteria and swept in accordance with the permit requirements given in table II.B-2.
  - CBERRRSA provided the data to document the street/road names, times and the dates swept, loads counts for the road or the area and the equipment package that was used to accomplish the task to the Municipal Watershed Management department.

**Pg 22 v) Street and Road Sweeping**

- After review of the past three years sweeping practices in the CBERRRSA area and thru compliance to the sweeping criteria, the Eagle River Street Maintenance staff had eliminating our summer sweep and will modify the summer sweep to a "as needed" basis and incidental sweeping will be site specific for our area.
  - ERSM will continue to evaluate the areas and our overlay program and move certain roads from the kick broom listing to the pick up broom list as necessary to better serve the community and will forward the list and changes to WMS when the reviews are complete.

**Pg 23 e) Implement appropriate requirements for patricide, herbicide and fertilizer applications.**

- CBERRRSA did not use and pesticides, herbicides, or fertilizer in 2013

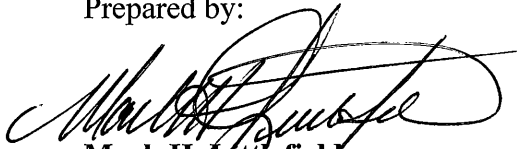
**Pg 23 f) Develop and implement Storm Water Prevention Plans.**

- CBERRRSA has in place master plans and SWPPP's for our two storage facilities, one at 8501 Hesterberg Lane, Eagle River and the other at 19200 Kerbow Lane, Chugiak. Both locations are being inspected on the permit required basis.
  - No reported spills or unplanned discharges took place at either location in 2013
  - Once the sand storage facilities are constructed ERSM will revisit our master plans and update as necessary.

**Pg 23 g) Training**

- Copy of Contractor personnel during our fall meeting, items discussed:
  - Spill response
    - Contact info and first responder requirements
  - Plowing techniques
  - Sand and deicer use and reporting procedures
  - Updated CESCEL

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## 2013 MS4 Summary For ARDSA

**Costs Incurred:**

			Force Account				
			Contracted	Labor	Equipment	GBA Costs / Mt'l Costs	Total
Sweeping	Spring	4/18/13 to 5/13/13				\$692,405	\$692,405
	Summer	6/02/13 to 7/18/13				\$282,380	\$282,380
	Fall	8/30/13 to 9/26/13				\$169,117	\$169,117
			\$138,886				\$138,886
<b>Total Street Sweeping</b>			<b>\$138,886</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,143,902</b>	<b>\$1,282,788</b>
Storm Drainage/ Control Structure System Maintenance			***79,000	\$23,691	** \$22,000	*	\$124,691
OGS Maintenance			N/A	\$39,329	** \$40,000	*	\$79,329
Winter Sand		10,000 T	N/A	\$213,770	** \$40,000		\$253,770
Sand Storage Facility (Utility Costs)			N/A	*	*	** \$40,000	\$40,000
Magnesium Chloride		10,000 Gal	N/A	*	*	** \$19,000	\$19,000
GBA-Asset Management Data Collection Outside Vendor People Soft labor costs for Mapping			*	\$33,166	*	*	\$33,166
Storm Water Pollution Prevention Plans & Inspections (Maintenance Projects)			\$44,302	\$71,751	*	*	\$116,053
Facility CGP's and Inspections			\$44,465		*	*	\$44,465
<b>Total</b>			<b>\$306,653</b>	<b>\$381,707</b>	<b>\$102,000</b>	<b>\$1,202,902</b>	<b>\$1,993,262</b>

\* Not Quantified

\*\* Estimated

\*\*\* New Contract bid in 2013 reflects a dramatic savings as Contractors compete for market share.

This cost is still too recent to expect that this is a true Contractor cost.

### **Part II. Storm Water Management Program (SWMP) Requirements**

#### **Pg. 6, A. General Requirements, 1.- 3.**

It is the opinion of the Department of Public Works, Street Maintenance Section, (SM) that Anchorage (ARDSA) has met the requirements of this section.

Working in concert with WMS and other co-permittee(s) to meet these requirements.

**Pg. 7, 1.: Construction Site Runoff Control Program, B. Minimum Control Measures**

ARDSA, SM activities have met the requirements of this section for all Street Maintenance projects within the service area (ARDSA).

**Pg. 13, 2.: Storm Water Management Areas of New Development and Redevelopment**

ARDSA, SM continues to support WMS in the implementation of this section and the subsections.

**Pg. 17, e.) Operation and Maintenance (O & M) of Permanent Storm Water Management Controls, i.) Inventory and Tracking**

ARDSA, SM continues to develop and maintain a computer maintenance management system (CMMS). This system includes geographical Information system (GIS) information that will be directly related to the maintenance of these assets. Presently, SM expects to meet the requirements of the permit within 5 years of the expiration of the permit. After four full seasons of inventory assessment SM is approximately 95% complete in meeting the requirements of this section.

**Pg. 18, f.) Inspection and Enforcement of Permanent Storm Water Management**

ARDSA SM continues to work closely with Private Development, Planning and (WMS) to attain the requirements of this Section.

**Pg. 18, g.) Education and Training on Permanent Storm Water Controls**

Training is viewed as an ongoing effort within our organization, ARDSA SM met the goals as outlined in the current permit.

**Pg. 19, 3.) Industrial and Commercial Storm Water Discharge Management**

ARDSA SM continues to work directly with the administrator (WMS) of the current permit to meet the requirements of this Section.

**Pg. 20, 4.) Storm Water Infrastructure and Street Management**

**a.) Storm Sewer System Inventory and Mapping**

SM in coordination with WMS is presently at 95% complete with the requirements of this Section, the CMMS will facilitate much of the requirements of Public Works (DPW).

**Pg. 21, 4.), b.) Catch Basin and Inlet Cleaning**

ARDSA SM successfully completed these permit requirements. All 226 OGS units were inspected and cleaned. All control structures were inspected and those that required cleaning, were cleaned. ARDSA cleaned some 3344 CB & CBMH, out of the total inventory of 9299 units. All structures identified as priority sites during the 2012 season were cleaned and re-inspected.



**Pg. 21, 4.), c.) Street and Road Maintenance**

Substantially in compliance with the permit. SM materials inventories are completed (See Costs Incurred), continued efforts will be employed to further the accuracy of materials on hand from season to season. Sand storage building continues to be the prime location for maintenance materials.

**Pg. 22, 4.), d.) Street and Road Sweeping**

In coordination with WMS, SM has met these requirements.

**Pg. 23, 4.), e.) Pesticide, herbicide and fertilizer applications**

Presently, DPW, SM does not use these types of materials.

**Pg. 23, 4.), f.) Develop and Implement Storm Water Pollution Prevention Plans**

In Coordination with WMS/PM&E SWPPP's were completed for each of the facilities in 2012 as required. SM and WMS contracted with Professional and Technical Services, Inc. (PTS) to write and inspect the CGP's/SWPPP's for all SM operated facilities and maintenance projects. SM maintains the BMP's.

**Pg. 23, 4.), g.) Training**

Training has been conducted for Sweeping Practices/Protocol, project BMP's, SOP's and Spill Prevention/Response. This training will continue to meet the permits intent. Several employees are CESCL trained and SM will continue this effort in the years that follow.

**Pg. 26, 5.), f.) Prevent and respond to Spills to the MS4**

In 2013, there was one incident that SM is aware of, the discharge took place along 15th Avenue between Lake Otis and Orca Street (Grid No. SW 1432 & SW 1433) intially on November 14, 2013, discharge appeared to have been coming from the Merrill Field property (Managed by the MOA, Solid Waste Services). ADEC, SWS and WMS were directly involved with the release. SM continues to train employees on spill prevention and response. SM is prepared to participate and assist the emergency response team when a policy has been signed and implemented.