

# HONOLULU ENGINEER DISTRICT

The civil works responsibilities of the Honolulu District encompass the State of Hawaii, the Territory of Guam, the Territory of American Samoa, and the Commonwealth of the Northern Mariana Islands. The

district is unique in that its area of responsibility is totally comprised of islands dispersed over an ocean environment exceeding 6 million square miles.

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## Navigation

### 1. KIKIAOLA SMALL BOAT HARBOR, KAUAI, HAWAII

**Location.** Kikiaola Harbor is located on the southwest coast of the island of Kauai, approximately 1 mile southeast of Kekaha and approximately 2 miles west of Waimea (See NOAA Chart 19386)

**Existing project.** The authorized project consists of removing a 150-foot long portion from an existing outer east stub breakwater; removing and reconstructing a 71-foot long inner east stub breakwater; modifying 245-foot long portion of the existing west breakwater; modifying 820-foot long portion of the existing east breakwater; dredging a new 725-foot long entrance channel to a depth of 11-feet and varying in width from 105 to 205-feet; and dredging a 320-foot long access channel to a 7-foot depth and varying in width from 70 to 105-feet.

**Local cooperation.** The Project Cooperation Agreement (PCA) was executed in August 2005. Requirements are described in full on page 31-2 of the Fiscal Year 2006 Annual Report.

**Terminal facilities.** There is an existing 1,280-foot long east breakwater with two short stub breakwaters; a 600-foot long west breakwater; a 225-foot long inner breakwater; a 150-foot long by 10-foot wide wooden wharf; a 50-foot long loading dock and adjacent launch ramp, all constructed by the State of Hawaii.

**Operations during fiscal year.** Work during the Fiscal Year included evaluating and incorporating cost savings measures, incorporating survey bench marks for compliance with HQUSACE guidelines, revising and finalizing plans and specifications and advertising and awarding the construction contract on 6 September 2007. Total costs incurred during the Fiscal Year were \$339,483.

### 2. MAALAEA HARBOR, MAUI, HAWAII

**Location.** Maalaea Bay is situated on the southwest coast of Maui, approximately 7 miles south of Wailuku, the county seat of Maui. (See NOAA Chart 19350)

**Existing project.** For a description of the existing project, see page 36-3 of the Fiscal Year 1989 Annual Report. (See Table 36-B for Authorizing Legislation)

**Local cooperation.** The Project Cooperation Agreement (PCA) is delayed due to concerns raised as a result of the Supplemental Environmental Impact Statement review.

**Terminal facilities.** There is an existing 1,000-foot long south breakwater, a 870-foot long east breakwater,

300-foot long wharf, 90-foot wide entrance channel, and a single lane launch ramp, all constructed by the State of Hawaii.

**Operations during fiscal year.** The local sponsor requested that the Project work be held in abeyance during the Fiscal Year. Total costs incurred during the Fiscal Year were \$578.

### 3. KAUMALAPAU HARBOR, LANAI, HAWAII

**Location.** The project is located on the southwestern coast of the Island of Lanai. (See NOAA Chart 19351)

**Existing project.** The project repaired the existing breakwater built in 1925 that was previously owned by private interests. The existing breakwater was repaired using 35-ton Core Loc concrete armor units. The length of the breakwater will be 320 feet long.

**Local cooperation.** The Project Cooperation Agreement (PCA) was executed in September 2003. Requirements are described in full on page 31-2 of the Fiscal Year 2003 Annual Report.

**Terminal Facilities.** A 200-foot long rubblemound breakwater with a crest elevation of about +10 feet protects a 400-foot long wharf which is operated and owned by the State of Hawaii Harbors Division.

**Operations during fiscal year.** Repair work on breakwater using 819 35-ton Core-loc units was physically completed on 8 June 2007. The dedication ceremony with the Congressional delegation in attendance was held on 7 July 2007. Total costs incurred during the Fiscal Year were \$6,943,369.

### 4. KAHULUI LIGHT DRAFT HARBOR, MAUI, HAWAII

**Location.** The Kahului Light Draft Harbor site is located within the Kahului Deep Draft Harbor on the northern coast of the Island of Maui. (See NOAA Chart 19342)

**Existing project.** The project includes removing an existing rock groin; constructing a 130-foot long rubblemound breakwater structure; dredging an entrance channel 1,030 feet long, 50 feet wide and 9.5 feet deep; and dredging a turning basin 100 feet long, 100 feet wide and 8.5 feet deep.

**Local cooperation.** The Project Cooperation Agreement (PCA) was executed in May 2003. Requirements are described in full on page 31-2 of the Fiscal Year 2004 Annual Report.

**Terminal Facilities.** A damaged rubblemound breakwater protects the harbor basin approximately 30 feet in length, with a crest elevation of about 8 feet. There is an existing single-lane boat launch ramp, a

wooden dock, and an entrance channel and turning basin dredged to a depth of minus 6.0 feet mean lower low water. All existing facilities were constructed by the State of Hawaii.

**Operations during fiscal year.** Contractor As-built drawings were finalized and the warranty inspection was accomplished during the Fiscal Year. Total costs incurred during the Fiscal Year were \$313,557.

## **5. RECONNAISSANCE AND CONDITION SURVEYS**

Condition surveys were conducted by the Portland District at Barbers Point Harbor, Honolulu Harbor on the island of Oahu, HI; Kahului Deep Draft Harbor, Kahului Light Draft Harbor on the island of Maui, HI; Kaunakakai Harbor on the island of Molokai, HI; Nawiliwili Deep Draft Harbor, Nawiliwili Small Boat Harbor, and Port Allen Harbor on the island of Kauai, HI. Total costs to conduct the surveys were \$42,335. Costs for inspections of protective structures at navigation projects, management of Honolulu District's maintenance dredging program and comprehensive evaluation of project datum's at navigation projects totaled \$348,052 during the Fiscal Year. See Table 31-H for navigation inspections performed during the Fiscal Year.

## **6. INSPECTION OF COMPLETED FLOOD CONTROL AND BEACH EROSION CONTROL PROJECTS**

Inspection of completed local flood protection projects is performed periodically in compliance with Section 208.10, of Title 33, Code of Federal Regulations, which contains regulations for operation and maintenance of local flood-protection works approved by the Secretary of the Army in accordance with authority in Section 3, Flood Control Act of June 22, 1936.

Costs to complete evaluation of existing I-wall structures at 2 flood damage reduction projects; the comprehensive evaluation of project datum and inspection costs for completed flood control and beach erosion control projects incurred during the Fiscal Year were \$183,998. See Table 31-I for inspections performed during the Fiscal Year.

## **7. NAVIGATION WORK UNDER SPECIAL AUTHORIZATION**

**Navigation activities pursuant to Section 107, Public Law 86-645, as amended (Preauthorization).** See Table 31-J.

## **Beach Erosion Control**

### **8. LAUNIUPOKO SHORELINE PROTECTION, MAUI, HAWAII**

**Location.** The project is located on the western coast of the Island of Maui. The Island of Maui is located approximately 100 miles southeast of Honolulu, Hawaii. (See NOAA Chart 19348)

**Existing project.** The project construction consists of two reaches, totaling approximately 500 feet, of rubble mound revetments with a crest elevation of +12-feet (MLLW). The single layer revetment will be constructed of 1600-2500 pound armor stone, over a 2-foot thick underlayer of 50-150 pound stone.

**Local cooperation.** The Project Cooperation Agreement (PCA) was executed in January 2002. Requirements are described in full on Page 31-3 of the Fiscal Year 2002 Annual Report.

**Operations during fiscal year.** The construction contract for improvements was terminated for convenience by the Government on March 2005 due to significant differing site conditions. Preparation of permit applications continued during the Fiscal Year. Total costs incurred during the Fiscal Year were \$500.

### **9. BEACH EROSION WORK UNDER SPECIAL AUTHORIZATION**

**Emergency streambank and shoreline protection activities pursuant to Section 14, Public Law 79-526, as amended (Preauthorization).** See Table 31-K.

**Beach Erosion control activities pursuant to Section 103, Public Law 87-874, as amended (Preauthorization).** See Table 31-L.

## **Flood Control**

### **10. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION**

**Flood control activities pursuant to Section 205, Public Law 80-858, as amended (Preauthorization).** See Table 31-M.

**Project Modifications for Improvements of Environment pursuant to Section 1135, Public Law 99-662, as amended (Preauthorization).** See Table 31-N.

**Aquatic Ecosystem Restoration pursuant to Section 206, Public Law 104-303. (Preauthorization)**

## REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2007

Fiscal Year costs were \$38,263 for Saipan Lagoon, CNMI; \$133,730 for Mokuhinia/Mokuula, Maui, HI; and \$4,310 for coordination with other agencies.

### **Emergency flood control activities pursuant to Public Law 84-99.**

Federal cost during the Fiscal Year for Flood Control and Coastal Emergencies appropriation was \$1,409,997 of which \$504,570 was for disaster preparedness; and \$132,774 for emergency operations; \$771,776 for rehabilitation and field inspections.

## **General Investigations**

### **11. SURVEYS**

Fiscal Year costs were \$745,915 of which \$204,895 was for navigation studies; \$39,647 was for flood damage prevention studies; \$318,243 for special studies; \$151,214 for miscellaneous activities; and \$31,916 for coordination with other agencies. In addition, \$218,966 in non-Federal funds for coordination with other agencies; \$236,189 for cost-shared navigation studies; \$123,669 for cost-shared flood damage reduction studies and \$31,500 for cost-shared special studies.

### **12. COLLECTION AND STUDY OF BASIC DATA**

**Flood plain management services.** The Flood Plain Management Services Program is authorized and implemented under Section 206, PL 86-645, 1960 Flood Control Act, as amended. Through technical

services and planning guidance, the program provides information on floods and flood related information to improve planning for the careful use of the nation's flood plains, thereby reducing the potential for losses to life and property from floods and wave actions. Non-Federal agencies are assisted with flood hazard evaluation and planning information for flood and coastal hazard areas without charge.

As of November 1991, Federal agencies and private entities were also offered these services on a cost recovery basis. This assistance is in the form of local flood plain regulations, National Flood Insurance Requirements, and Executive Order 11988 requirements for federal agencies. Such assistance may include flood information and timing, floodwater velocity, extent of flooding, duration of flooding, flood frequency and regulatory floodway limits.

**Services accomplished during fiscal year.** There were 384 site requests for technical services and planning assistance and publication responses. These services were requested and provided to Federal agencies, state and local government agencies, individuals, realtors, corporations, lending institutions, engineers, architects and other private parties. Costs for providing these services during the fiscal year were \$469,108.

**Hydrologic Studies.** Storm studies cost was \$12,034. Total costs for collection and study of basic data during the Fiscal Year were \$481,142.

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**TABLE 31-A COST AND FINANCIAL STATEMENT**

See Section In Text	Project	Funding	FY04	FY05	FY06	FY07	Total Cost to Sept. 30, 2007
1.	Kikiaola Small Boat Harbor Kauai, HI (Federal Funds)	New Work: Approp. Cost	219,000 158,277	2,221,000 300,276	2,401,000 256,141	15,746,000 339,483	22,147,000 2,605,975
	(Contributed Funds)	Contrib. Cost	--- ---	785,000 ---	1,793,000 ---	--- ---	2,578,000 ---
2.	Maalaea Harbor Maui, HI (Federal Funds)	New Work: Approp. Cost	198,000 175,515	89,000 145,717	-8,000 36,216	--- 578	4,768,700 4,637,727
3.	Kaunalapau Harbor Lanai, HI (Federal Funds)	New Work: Approp. Cost	2,483,000 207,762	2,978,000 3,202,872	12,870,000 9,613,593	--- 6,943,369	23,619,000 20,488,894
	(Contributed Funds)	Contrib. Cost	1,500,000 ---	642,000 522,361	695,000 1,252,396	--- 958,544	2,837,000 2,733,301
4.	Kahului Light Draft Harbor, Maui, HI (Federal Funds)	New Work: Approp. Cost	200,000 ---	2,196,000 1,896,616	200,000 318,412	--- 313,557	2,596,000 2,528,585
	(Contributed Funds)	Contrib. Cost	244,000 ---	114,000 280,056	--- 53,310	14,500 36,495	372,500 369,861
8.	Launiupoko Shoreline Protection Maui, HI (Federal Funds)	New Work: Approp. Cost	210,000 10,570	--- 73,984	360,000 11,930	--- 500	960,000 328,784
	(Contributed Funds)	Contrib. Cost	--- 5,001	--- 90,550	--- 5,885	--- 9,830	244,000 126,959

**TABLE 31–B AUTHORIZING LEGISLATION**

<b>See Section In Text</b>	<b>Date Authorizing Act</b>	<b>Project and Work Authorized</b>	<b>Documents</b>
1.	Aug. 3, 1968	<b>KIKIAOLA SMALL BOAT HARBOR, KAUAI, HAWAII</b> A 700-foot long, 105 to 205-foot wide, and 11-foot deep entrance channel; a 320-foot long, 70 to 105-foot wide, and 7-foot deep access channel; modification of 220-foot portion of the existing west breakwater; and modification of 820-foot portion of the existing east breakwater; removal and reconstruction of an 85-foot long inner east breakwater; removal of a 150-foot long portion of the existing outer east stub breakwater.	Sec 101, PL 90–483 Cong., 2nd sess.
2.	Aug. 3, 1968	<b>MAALAEA HARBOR, MAUI, HAWAII</b> A 620-foot long extension of the south breakwater, a new 610-foot length, 150 to 180-foot width, 12 to 15-foot depth entrance channel, a 1.7 acre and 12-foot depth turning basin and a 720-foot length, 80-foot width and an 8-foot deep access channel.	Sec 101, PL 90–483 Cong., 2nd sess.
3.	Oct. 27, 2000	<b>KAUMALAPAU HARBOR, LANAI, HAWAII</b> Repair existing breakwater using 35-ton core loc concrete armor units. The length of the repaired breakwater will be 320 feet.	Sec 1(a), PL 106-377 Cong., 2 <sup>nd</sup> sess.
4.	Jul. 14, 1960 As amended	<b>KAHULUI LIGHT DRAFT HARBOR, MAUI, HAWAII</b> Removal of existing rock groin; a 130-foot long rubblemound breakwater structure; a 1,030-foot long, 50-foot wide and 9.5-foot deep entrance channel; and a 100-foot long, 100-foot wide, and 8.5-foot deep turning basin.	Sec 107, PL 86-645 Authorized by POD Sep. 4, 2002
8.	Jul. 24, 1946 As amended	<b>LAUNIUPOKO SHORELINE PROTECTION, MAUI, HAWAII</b> Two reaches of rubble mound revetment totaling 500 feet in length; the single layer revetment constructed of 1,600 to 2,500 pound armor stone, over a 2-foot underlayer of 50 to 150 pound stone.	Sec 14, PL 79–526 Authorized by POD Dec. 27, 2001

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**TABLE 31-C OTHER AUTHORIZED NAVIGATION PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2007	
			Construction	Operations and Maintenance
Agana Small Boat Harbor, Guam	Completed	1978	\$ 937,798 <sup>1</sup>	\$ 52,555
Agat Harbor, Guam	Completed	1989	2,000,000 <sup>2</sup>	---
Auasi Harbor, American Samoa	Completed	1982	1,033,015 <sup>3</sup>	141,797
Aunuu Harbor, American Samoa	Completed	1982	1,783,129 <sup>4</sup>	1,413,179
Barbers Point Harbor, Oahu, Hawaii	Completed	1990	53,519,193 <sup>5</sup>	2,247,953
Haleiwa Small Boat Harbor, Oahu, Hawaii	Completed	1978	527,047 <sup>6</sup>	498,402
Hilo Harbor, Hawaii, Hawaii	Completed	1991	5,512,440	4,106,308
Honokohau Small Boat Harbor, Hawaii, Hawaii	Completed	1971	781,036 <sup>7</sup>	63,693
Honolulu Harbor, Oahu, Hawaii	Completed	1985	16,044,095 <sup>8</sup>	4,803,941
Kahului Beach Road, Maui, Hawaii	Completed	1976	751,867 <sup>9</sup>	---
Kahului Harbor, Maui, Hawaii	Completed	1984	7,203,221 <sup>10</sup>	9,103,320
Kalaupapa Harbor, Molokai, Hawaii	Completed	1968	157,997 <sup>9</sup>	3,127
Kaulana Bay Boat Harbor, Hawaii, Hawaii	Inactive	1990	171,400	---
Kawaihae Harbor, Hawaii, Hawaii	Completed	1998	12,043,843 <sup>11</sup>	61,800
Keehi Lagoon, Oahu, Hawaii	Completed	1956	3,348,000 <sup>12</sup>	41,857
Kikiaola Small Boat Harbor, Kauai, Hawaii	Active	1981	193,000	---
Laupahoehoe Harbor, Hawaii, Hawaii	Completed	1990	3,623,450 <sup>13</sup>	---
Manele Bay Small Boat Harbor, Lanai, Hawaii	Completed	1986	372,000 <sup>14</sup>	1,407,473
Nawiliwili Harbor, Kauai, Hawaii	Completed	1987	2,127,724 <sup>15</sup>	11,047,275
Nawiliwili Small Boat Harbor, Kauai, Hawaii	Completed	1976	584,513 <sup>16</sup>	30,707
Ofu Small Boat Harbor, American Samoa	Completed	1976	980,018 <sup>17</sup>	5,857,651
Pohoiki Bay, Hawaii, Hawaii	Completed	1979	432,523 <sup>9</sup>	66,993
Port Allen Harbor, Kauai, Hawaii	Completed	1984	752,645 <sup>18</sup>	3,258,564
Rota Harbor, CNMI	Completed	1985	2,000,000 <sup>19</sup>	621,637
Saipan Small Boat Harbor, CNMI	Deferred	1982	194,000	---
Tau Small Boat Harbor, American Samoa	Completed	1985	1,991,569 <sup>20</sup>	656,112
Waianae Small Boat Harbor, Oahu, Hawaii	Completed	1979	1,940,011 <sup>21</sup>	122,400
Welles Harbor, Midway Island	Completed	1950	2,448,056 <sup>22</sup>	2,111

<sup>1</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$282,474 for Construction.

<sup>2</sup> In addition, Contributed Funds of \$1,239,364 for Construction.

<sup>3</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$86,563 for Construction.

<sup>4</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$231,437 for Construction.

<sup>5</sup> In addition, Contributed Funds of \$2,402,909 for Construction.

<sup>6</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$410,077 for Construction and \$84,388 for Operation and Maintenance.

<sup>7</sup> In addition, Contributed Funds of \$630,568 for Construction.

<sup>8</sup> In addition, Contributed Funds of \$201,282 for Construction.

<sup>9</sup> Authorized by the Chief of Engineers.

<sup>10</sup> In addition, Contributed Funds of \$30,200 for Construction.

<sup>11</sup> In addition, Contributed Funds of \$647,569 for Construction.

<sup>12</sup> Abandonment authorized by R & H Act of 1965 (HD 98, 89th Congress, 1st Session).

<sup>13</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$364,757 for Construction.

<sup>14</sup> In addition, Contributed Funds of \$370,845 for Construction.

<sup>15</sup> In addition, Contributed Funds of \$223,261 for Construction.

<sup>16</sup> Authorized by the Chief of Engineers and completed in November 1974. In addition, Contributed Funds of \$405,471 for Construction.

<sup>17</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$61,953 for Construction.

<sup>18</sup> In addition, Contributed Funds of \$200,000 for Construction.

<sup>19</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$774,373 for Construction.

<sup>20</sup> Authorized by the Chief of Engineers. In addition, Contributed Funds of \$54,034 for Construction.

<sup>21</sup> In addition, Contributed Funds of \$1,791,068 for Construction.

<sup>22</sup> Completed in 1941 and Maintenance transferred to Department of Navy.

**TABLE 31–D OTHER AUTHORIZED BEACH EROSION CONTROL PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2007	
			Construction	Operations and Maintenance
Afono Area and Aoa Area, American Samoa	Completed	1978	\$ 254,015 <sup>1</sup>	\$ ---
Alii Drive, Hawaii, Hawaii	Completed	2000	103,000 <sup>16</sup>	---
Asquiroga Bay, Guam	Completed	1986	227,181 <sup>2</sup>	---
Haleiwa Beach, Oahu, Hawaii	Completed	1967	240,148 <sup>3</sup>	---
Kaaawa Beach, Oahu, Hawaii	Completed	1976	176,488 <sup>4</sup>	---
Kapaa Town, Kauai, Hawaii	Completed	1977	158,916 <sup>5</sup>	---
Kekaha Beach, Kauai, Hawaii	Completed	1981	999,996 <sup>6</sup>	---
Kihei Beach, Maui, Hawaii	Completed	1972	154,313 <sup>7</sup>	---
Kualoa Regional Park, Oahu, Hawaii	Terminated	1982	355,472 <sup>8</sup>	---
Lepua Area, American Samoa	Completed	1992	1,706,225 <sup>9</sup>	---
Masefau Bay, American Samoa	Completed	1992	500,000 <sup>2</sup>	---
Matafao Shoreline, American Samoa	Completed	1984	225,000 <sup>2</sup>	---
Ofu Airstrip, American Samoa	Completed	1987	189,500	---
Pago Pago Airport, American Samoa	Completed	1984	174,941 <sup>2</sup>	---
Pago Pago to Nuuuli, American Samoa	Deferred	1978	394,187 <sup>10</sup>	---
Poloa Area, American Samoa	Completed	1978	136,040 <sup>11</sup>	---
Saipan Beach Road, CNMI	Completed	1992	176,000 <sup>2</sup>	---
Sand Island, Oahu, Hawaii	Completed	1981	301,879 <sup>12</sup>	---
Sand Island Shore Protection, Oahu, Hawaii	Completed	1992	1,313,400 <sup>13</sup>	---
Vatia Area, American Samoa	Completed	1978	154,309 <sup>14</sup>	---
Waikiki Beach, Oahu, Hawaii	Deferred	1979	729,087 <sup>15</sup>	183,000

<sup>1</sup>Authorized by the Chief of Engineers. In addition, \$209,549 in Contributed Funds.

<sup>2</sup>Authorized by the Chief of Engineers.

<sup>3</sup>In addition, \$160,098 in Contributed Funds.

<sup>4</sup>Authorized by the Chief of Engineers. In addition, \$97,075 in Contributed Funds.

<sup>5</sup>Authorized by the Chief of Engineers. In addition, \$56,916 in Contributed Funds.

<sup>6</sup>Authorized by the Chief of Engineers. In addition, \$1,672,524 in Contributed funds.

<sup>7</sup>Authorized by the Chief of Engineers. In addition, \$1,672,524 in Contributed Funds.

<sup>8</sup>Authorized by the Chief of Engineers and terminated in April 1980 as a Circuit Court ruled sand mining to be illegal. In addition, \$177,300 in Contributed Funds.

<sup>9</sup>Authorized by the Chief of Engineers. In addition, \$485,371 in Contributed Funds.

<sup>10</sup>Authorized by the Chief of Engineers. In addition, \$312,480 in Contributed Funds.

<sup>11</sup>Authorized by the Chief of Engineers. In addition, \$101,547 in Contributed Funds.

<sup>12</sup>Authorized by the Chief of Engineers. In addition, \$255,728 in Contributed Funds.

<sup>13</sup>Authorized for construction by Public Law 100D71. In addition, \$1,226,486 in Contributed Funds.

<sup>14</sup>Authorized by the Chief of Engineers. In addition, \$132,075 in Contributed Funds.

<sup>15</sup>In addition \$82,000 in Advanced Funds and \$17,640 in Contributed Funds.

<sup>16</sup>Authorized by the Chief of Engineers. In addition, \$126,000 in Contributed Funds.

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**TABLE 31-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2007	
			Construction	Operations and Maintenance
Alenaio Stream, Hawaii, Hawaii	Completed	1997	10,226,000 <sup>7</sup>	---
Asan Village, Guam	Completed	1986	1,275,500	---
Hanapepe River, Kauai, Hawaii	Completed	1967	784,867 <sup>1</sup>	---
Iao Stream, Maui, Hawaii	Completed	1985	12,621,108	356,523
Kahawainui Stream, Oahu, Hawaii	Completed	1998	4,672,021 <sup>2</sup>	---
Kahoma Stream, Maui, Hawaii	Completed	1990	10,988,750 <sup>3</sup>	---
Kaneohe-Kailua Area, Oahu, Hawaii	Completed	1985	25,552,400 <sup>4</sup>	---
Kaunakakai Stream, Molokai, Hawaii	Completed	1950	73,478 <sup>5</sup>	---
Kawainui Marsh, Oahu, Hawaii	Completed	1987	3,714,000 <sup>8</sup>	---
Kawainui Swamp, Oahu, Hawaii	Completed	1967	1,265,567	---
Kuliouou Stream, Oahu, Hawaii	Completed	1971	1,000,000 <sup>6</sup>	---
Namo River, Guam	Completed	1982	2,416,314 <sup>5</sup>	---
Paaau Stream, Hawaii, Hawaii	Completed	1985	1,978,514	---
Wailoa Stream and Tributaries, Hawaii, Hawaii	Completed	1966	1,044,888	---

<sup>1</sup>In addition, \$11,953 in Contributed Funds.

<sup>2</sup>Authorized by the Chief of Engineers. In addition, \$679,205 in Contributed Funds.

<sup>3</sup>In addition, \$645,992 in Contributed Funds.

<sup>4</sup>Includes Non-Federal reimbursement of recreation construction cost of \$5,668,300. In addition, \$8,175 in Contributed Funds.

<sup>5</sup>Authorized by the Chief of Engineers.

<sup>6</sup>Authorized by the Chief of Engineers. In addition, \$540,335 in Contributed Funds.

<sup>7</sup>In addition, \$4,483,300 in Contributed Funds.

<sup>8</sup>Authorized by the Chief of Engineers. In addition, \$1,293,000 in Contributed Funds.

**TABLE 31-F OTHER AUTHORIZED MULTIPLE PURPOSE PROJECTS, INCLUDING POWER**

Project	Status	For Last Full Report See Annual Report for:	Cost to September 2007	
			Construction	Operations and Maintenance
Nanpil River Hydropower, Pohnpei, Federated States of Micronesia	Completed	1994	\$ 8,000,000	\$ ---

REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2007

**TABLE 31–G DEAUTHORIZED PROJECTS**

<b>Project</b>	<b>For Last Full Report See Annual Report for:</b>	<b>Date and Authority</b>	<b>Federal Funds Expended</b>	<b>Contributed Funds Expended</b>
Agana River, Guam	1989	April 2002 PL 99-662	\$ 250,000	\$ ---
Ala Wai Harbor, Oahu, Hawaii	1976	November 1986 PL 99-662	40,117	---
Coconut Point, Nu'uuli, Tutuiula Island, American Samoa	---	April 2002 PL99-662	50,000	---
Hana Small Boat Harbor, Maui, Hawaii	1967	November 1977 HD #94-413	---	---
Hanalei Small Boat Harbor, Kauai, Hawaii	1967	November 1981 HD #97-59	---	---
Hanapepe Bay, Kauai, Hawaii	1965	November 1986 PL 99-662	---	---
Heeia-Kea Small Boat Harbor, Oahu, Hawaii	1972	January 1990 PL 99-662	1,481	---
Hilo Deep Draft Harbor, Hawaii, Hawaii	---	April 2002 PL 99-662	89,000	---
Kailua Small Boat Harbor, Oahu, Hawaii	1967	January 1990 PL 99-662	---	---
Kaimu Black Sand Beach, Hawaii, Hawaii	1975	July 1981 Director of Civil Works	86,235	---
Kapaakea Homestead Flood Control, Molokai, Hawaii	1979	July 1981 Director of Civil Works	221,500	---
Kaunakakai Deep Draft Harbor, Molokai, Hawaii	1966	January 1990 PL 99-662	133,188	292,441
Kaunakakai Small Draft Harbor, Molokai, Hawaii	---	January 1990 PL 99-662	---	---
Kewalo Harbor, Oahu, Hawaii	1976	September 1975 Director of Civil Works	98,800	---
Lahaina Small Boat Harbor, Maui, Hawaii	1977	January 1990 PL 99-662	186,937	---
Maunalua Bay Small Boat Harbor, Oahu, Hawaii	1972	January 1990 PL 99-662	30,378	---

**TABLE 31–G (Contd.)                      DEAUTHORIZED PROJECTS**

Project	For Last Full Report See Annual Report for:	Date and Authority	Federal Funds Expended	Contributed Funds Expended
Nawiliwili Deep Draft Harbor, Kauai, Hawaii	---	January 1990 PL 99-662	---	---
Rainmaker Hotel, American Samoa	---	November 1991 PL 99-662	---	---
Reeds Bay Small Boat Harbor, Hawaii, Hawaii	1967	January 1990 PL 99-662	---	---
Saipan Harbor, Northern Marianas	---	November 1991 PL 99-662	---	---
Talofofo Bay Shore Protection, Guam	---	August 1981 Director of Civil Works	80,764	---
Waimea Beach, Kauai, Hawaii	---	November 1986 PL 99-662	---	---
Wake Island Harbor, Wake Island	1950	November 1986 PL 99-662	---	---

**TABLE 31–H                                      INSPECTION OF COMPLETED  
NAVIGATION PROJECTS**

Location	Dates of Inspection
<b>Navigation Projects</b>	
Agana Small Boat Harbor, Guam	July 2007
Agat Small Boat Harbor, Guam	July 2007
Barbers Point Harbor, Oahu, Hawaii	September 2007
Haleiwa Small Boat Harbor, Oahu, Hawaii	September 2007
Hilo Harbor, Hawaii, Hawaii	June 2007
Honokohau Small Boat Harbor, Hawaii, Hawaii	June 2007
Kahului Deep Draft Harbor, Maui, Hawaii	August 2007
Kaulaupapa Barge Harbor, Molokai, Hawaii	April 2007
Kawaihae Deep Draft Harbor, Hawaii, Hawaii	June 2007
Kawaihae Small Boat Harbor, Hawaii, Hawaii	June 2007
Laupahoehoe Harbor, Hawaii, Hawaii	June 2007
Manele Small Boat Harbor, Lanai, Hawaii	April 2007
Nawiliwili Small Boat, Kauai, Hawaii	June 2007
Pohoiki Launch Ramp Facility, Hawaii, Hawaii	June 2007

**TABLE 31–H (Contd.) INSPECTION OF COMPLETED NAVIGATION PROJECTS**

Location	Dates of Inspection
Port Allen Harbor, Kauai, Hawaii	June 2007
Rota Harbor, CNMI	July 2007
Waianae Small Boat Harbor, Oahu, Hawaii	September 2007

**TABLE 31–I INSPECTION OF COMPLETED FLOOD CONTROL AND BEACH EROSION CONTROL PROJECTS**

Location	Dates of Inspection
<b>Flood Control Projects</b>	
Alenaio Stream, Hawaii, Hawaii	October 2006
Asan Village, Guam	November 2006
Hanapepe River, Kauai, Hawaii	December 2006
Iao Stream, Maui, Hawaii	October 2006
Kahawainui Stream, Oahu, Hawaii	January 2007
Kahoma Stream, Maui, Hawaii	November 2006
Kaneohe-Kailua Dam, Oahu, Hawaii	January 2007
Kaunakakai Stream, Molokai, Hawaii	October 2006
Kawainui Marsh, Oahu, Hawaii	January 2007
Kuliouou Stream, Oahu, Hawaii	January 2007
Namo River, Guam	November 2006
Paauau Stream, Hawaii, Hawaii	October 2006
Wailoa Stream, Hawaii, Hawaii	October 2006
Waimea River, Kauai, Hawaii	December 2006
<b>Beach Erosion Control Projects</b>	
Asquiroga Bay, Guam	November 2006
Haleiwa Beach Park, Oahu, Hawaii	September 2007
Kaaawa Beach Park, Oahu, Hawaii	January 2007
Kahului Bay, Maui, Hawaii	August 2007
Sand Island, Oahu, Hawaii	September 2007
Sand Island State Park, Oahu, Hawaii	September 2007

**TABLE 31–J NAVIGATION ACTIVITIES PURSUANT TO SECTION 107, PUBLIC LAW 86-645, AS AMENDED (PREAUTHORIZATION)**

Study	Fiscal Year Costs
Apra Small Boat Harbor, Guam	43
Kahoolawe Small Boat Harbor, Hawaii	1,708
Kahului Light Draft Harbor, Hawaii	313,557
Coordination Account	8,519
TOTAL	\$323,827

**TABLE 31–K      EMERGENCY STREAMBANK AND SHORELINE  
PROTECTION ACTIVITIES PURSUANT TO SECTION 14  
PUBLIC LAW 79-526, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal Year Costs
Hauula Highway, Oahu, Hawaii	\$ 15
Kaaawa Highway, Oahu, Hawaii	87
Launiupoko, Maui, Hawaii	500
Punaluu Highway, Oahu, Hawaii	62
Coordination Account	5,567
TOTAL	\$6,231

**TABLE 31–L      BEACH EROSION CONTROL ACTIVITIES  
PURSUANT TO SECTION 103  
PUBLIC LAW 87-874, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal Year Costs
Commercial Port Road, CNMI	\$ 11,276
Leloaloa, American Samoa	91,428
Talofofu Beach Park, Guam	1,463
Umatac Bay, Guam	1,463
Coordination Account	44,307
TOTAL	\$149,937

**TABLE 31–M      FLOOD CONTROL ACTIVITIES  
PURSUANT TO SECTION 205,  
PUBLIC LAW 80–858, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal Year Costs
Kapaakea Stream, Molokai, Hawaii	24
Keopu-Hienaloli Stream, Hawaii, Hawaii	8,362
Palai Stream, Hawaii, Hawaii	8,042
Waiakea Stream, Hawaii, Hawaii	222,726
Coordination Account	7,538
TOTAL	\$246,692

**TABLE 31–N                    MODIFICATIONS FOR IMPROVEMENTS  
OF ENVIRONMENT PURSUANT TO SECTION 1135  
PUBLIC LAW 99–662, AS AMENDED  
(PREAUTHORIZATION)**

Study	Fiscal Year Costs
Kanaha Pond, Maui, Hawaii	\$100,737
Kawainui Marsh, Oahu, Hawaii	7,533
Kaunakakai Stream, Molokai, Hawaii	7,800
Pelekane Bay, Hawaii, Hawaii	337,056
Coordination Account	4,045
TOTAL	\$457,171

# ALASKA DISTRICT

This District consists of the State of Alaska.

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## Navigation

### 1. ANCHORAGE HARBOR, AK

**Location.** Anchorage is in south-central Alaska on the southeast shore of Knik Arm, north of Turnagain Arm near its junction with Cook Inlet. (See NOAA Charts 16660 and 16664.)

**Existing project.** Authorized by the Rivers and Harbors Act, 3 July 1958, as amended, provides for a deep water harbor by dredging to a depth of -35 MLLW. The existing project accommodates three dry cargo berths and two petroleum handling facilities. The Consolidated Appropriations Act, 2005, P.L. 108-447, modified the project authorization for the Port by directing the Secretary of the Army to deepen the to -45 feet mean lower low water (MLLW) for a length of 10,860 feet at the modified Port of Anchorage intermodal marine facility and continue Federal maintenance up to the face of the new dock. It is the main supply and distribution center for the south-central and interior areas and the two large military bases that lie within the Municipality of Anchorage. The Port of Anchorage is the largest cargo port in Alaska and was designated the nation's 13<sup>th</sup> strategic port in August of 2004. The tidal range between mean lower low water and mean higher high water is 29 feet with an extreme range of 41 feet. P.L. 108 - 447, Div C (EWDA) 2005), Sec 118 authorized deepening of the harbor to -45 MLLW at the modified Port of Anchorage intermodal marine facility.

**Local cooperation.** Fully complied with.

**Accomplishments during fiscal year.** Maintenance dredging was performed under the second year option of a 2-year RFP contract with Manson Construction. Dredging was conducted from June thru October with a total of 1,766,357 cubic yards removed FY 2007.

### 2. CHIGNIK HARBOR, AK

**Location.** The city of Chignik is located on the south side of the Alaska Peninsula about 450 miles southwest of Anchorage.

**Existing project.** The city of Chignik is situated on the south shore of Alaska Peninsula in Southwestern Alaska. It is an active and growing island port whose economy is heavily dependent on commercial fishing. The local fleet presently anchors in the ice free, but inadequately protected harbor or ties up at the exposed city dock. At present boats are subject to overcrowding and hazardous mooring conditions between fishing periods. The anchorage is exposed to all storms from the southeast clockwise to the northwest. The violent southeast

and northwest storms often damage and sometimes destroy boats by forcing them ashore or on the exposed rock reefs at low tides.

**Local cooperation.** Fully complied with.

**Terminal facilities.** The authorized project will provide a protected harbor, which will produce benefits in the form of reduced boat damage, increased fish harvest, and a harbor of refuge. The average annual navigation benefits attributable to the project are currently estimated at \$1,695,400. A construction contract was awarded on 20 August 2001 with West Construction for \$6,549,270. Construction contract was completed in FY 2005.

**Accomplishments during fiscal year.** Plans and specifications for the dredging contract were prepared and real estate acquired for the dredge disposal.

### 3. COOK INLET NAVIGATION, AK

**Location.** Southern flank of Knik Arm Shoal about 6 miles southwest of Anchorage, AK.

**Existing project.** Authorized by the 1996 Water Resources Development Act and amended in Public Law 105-245; provides for a 3,330 m long by 310 m wide by -11.5 m MLLW deep shipping channel into Knik Arm. Cook Inlet Navigation Channel provides all-tide access to the Port of Anchorage. The PCA was executed on 9 Jan 98. Construction contract was awarded on 2 Dec 98 and was completed in September 2000 for a combined Federal and Contributed Cost of \$10,507,100. A total of 1,459,543 cubic yards were removed in the two seasons of dredging by Manson Construction. The sponsor reimbursed the CORPS 10% of the project and the project is now fiscally complete. The Consolidated Appropriation Act, 2005, P.L. 108 - 447, Div C (EWDA 2005), Sec. 118 directed the Secretary to modify the channel to run the entire length of Fire Island and Port Woronzof Ranges, and to deepen it to -45 MLLW.

**Local cooperation.** Fully complied with.

**Terminal facilities.** This project reduces delays for the container ships that supply cargo for 80 percent of the Alaskan people.

**Accomplishments during fiscal year.** A hydrographic survey was completed to ensure navigational safety exists throughout the channel area. Reauthorization for deepening and lengthening the project and continuation of modeling studies was included in the FY05 Omnibus Bill (PL 108-447).

#### 4. CORDOVA HARBOR, AK

**Location.** Cordova is located at the southeastern end of Prince William Sound in the Gulf of Alaska. The community was built on Orca Inlet, at the base of Eyak Mountain. It lies 52 air miles southeast of Valdez and 150 miles southeast of Anchorage.

**Existing project.** Authorized by the Rivers and Harbors Act, 30 August 1935 (R & H Committee Doc. 33, 73rd Congress, 2nd Session) as adopted, provides for a sheltered small boat harbor of 8.26 acres with a depth of -10 feet MLLW protected by north and south breakwaters of 1,100 feet and 1,400 feet respectively, with provision for a future expansion of 10.4 acres to -14 feet MLLW. The small boat basin is used as a base of operations for commercial fishing, and provides moorage for 852 boats. Approximately 650 boats and skiffs are based in the Cordova area. The Cordova canning season is the longest and most diversified in the state.

**Local cooperation.** Fully complied with.

**Accomplishments during fiscal year.** Planning for a maintenance dredging contract was initiated. A hydrographic survey was completed to confirm reports of shoaling in the entrance channel and turning basin. Chemical testing of dredged material found material unsuitable for the nearby in-water disposal site. The chemical testing found that approximately 3000 cubic yards of contaminated material will need to be disposed of into the city landfill, and 13,000 cubic yards of clean material is to be disposed in a nearby in-water site. The contract is to be awarded in FY 2008.

#### 5. DILLINGHAM HARBOR, AK

**Location.** Dillingham Harbor is located at the head of Nushagak Bay, an arm of Bristol Bay, on the right bank of Nushagak River, just below its confluence with Wood River; about 470 miles northeast of Dutch Harbor and 300 miles southwest of Anchorage. (See NOAA/NOS Chart #16660.)

**Existing project.** The Rivers and Harbors Act of 1958 provides for a 650 to 800 foot wide X 700 foot long basin utilizing a 1100 foot long entrance channel to Nushagak Bay, the harbor provides half-tide access and all-tide moorage for over 320 commercial fishing vessels. The harbor is also used as an alternate landing area for lighterage vessels. Tidal range between mean lower low water and mean higher high water is 19.8 feet. Extreme range is 30 feet.

**Local cooperation.** Fully complied with.

**Terminal facilities.** There are four docks at the city of Dillingham; three privately owned, one owned by the city. Four publicly owned small boat floats located in the Harbor basin were installed in June 1982. They are removed before fall freezeup and replaced each spring.

**Accomplishments during fiscal year.** Annual maintenance dredging was carried out by Roy D. Garren, Inc. in June with the removal of 95,000 cubic yards using the second year of a 3-year RFP contract. A draft Dredged Material Management Plan was completed for internal District review that selects an in-water disposal site for the next 20 years of maintenance dredging operations. Because the base plan is in-water disposal and does not require cost sharing from non Federal interests, the report is reverting to a Preliminary Assessment that will include a new Environmental Assessment to be completed in FY 2008.

#### 6. FALSE PASS, AK

**Location.** False Pass is a small community located on the east side of Unimak Island, which is the east end of the Aleutian Island chain in Southwest Alaska. False Pass is approximately 700 air miles from Anchorage.

**Existing project .** The feasibility study was initiated in 1999 and the project authorized in the Water and Resources Development Act of 2000 to accommodate a fleet of 88 vessels in a 5.2-acre basin protected by two rubble-mound breakwaters, 1,300 feet and 600 feet in length. The project requires dredging of the inner basin and the entrance channel. The PCA was executed on 4 May 2004.

**Local cooperation.** Fully complied with.

**Accomplishments during fiscal year.** A contract was awarded 11 July 2005 to Kelly Ryan for \$19,729,300 with work beginning in the summer of 2006. The contract completion was extended to January 2009.

#### 7. HOMER HARBOR, AK

**Location.** In Kachemak Bay, on the Kenai Peninsula, 152 miles by water, southwest of Anchorage. The harbor site is near the extremity of Homer Spit, a narrow extension of land protruding southeasterly some 4.5 miles into the bay. (See NOAA/NOS Chart #16645.)

**Existing Project.** Authorized by the River and Harbors Acts of 1958 and 1964. The 50-acre project provides sheltered moorage for over 1,525 commercial fishing and recreational vessels. The project extends the fishing season an extra four months each year and is an integral part of

Homer's economy. Project depth varies from -10 feet (MLLW) in the west end of the harbor to -20 feet below (MLLW) in the entrance channel and the east end. The entrance channel is protected by a main rock breakwater 1,018 feet long and secondary rock breakwater 238 feet long. Tidal range between mean lower low and mean higher high water is 18.1 feet, with an extreme range of 30.4 feet. FY07 operations and maintenance costs for Homer Harbor were \$332,000.

**Accomplishments during fiscal year.** Annual maintenance dredging was carried out by Portable Hydraulic Dredging in September with the removal of approximately 5,000 cubic yards under the second year of a 2-year IFB contract. A draft Dredged Material Management Plan was prepared that identifies a new confined disposal facility on the north end of the existing harbor. Construction of the new facility is expected in 2009.

## 8. NINILCHIK HARBOR, AK

**Location.** Ninilchik Harbor is located at the mouth of Ninilchik River in Cook Inlet, at the village of Ninilchik. The community of Ninilchik, AK is about 40 miles upcoast from Homer and 112 miles southwest of Anchorage. (See NOAA/NOS Chart #16640.)

**Existing project.** This project is authorized by the Rivers and Harbors Act of 1958 for a basin 400 feet long by 150 feet wide and dredged to an elevation of 2 feet above mean lower low water. Also included was an approach channel 400 feet long and 50 feet wide dredged to an elevation of 9 feet above mean lower low water and protected by two rock jetties. The basin offers protected moorage with half-tide access for 32 vessels. The basin and channel also provide access for fishing boats to unload their catch and take on supplies. It is also an important harbor of refuge in the lower Cook Inlet region. Beach protection was accomplished in 1967 and 1969. The tide range between mean lower low water and mean higher high water is 19.1 feet, with an extreme range of 29.3 feet.

**Local cooperation.** Fully complied with.

**Accomplishments during fiscal year.** Annual maintenance dredging was carried out by Portable Hydraulic Dredging in May with the removal of approximately 9,000 cubic yards under the first year of a 2-year IFB contract.

## 9. NOME HARBOR, AK

**Location.** Nome Harbor is located at the mouth of the Snake River at the city of Nome, AK, on the northerly shore

of Norton Sound, an arm of the Bering Sea. It is a shallow open roadstead, 581 nautical miles north of Dutch Harbor and 545 air miles northwest of Anchorage. (See NOAA/NOS Chart #16206.)

**Existing project.** Authorized by the Rivers and Harbors Acts of 1917, 1935, and 1948. The original Federal navigation project, was constructed at 8 ft MLLW and consisted of a dogleg entrance channel 75 feet wide by 1550 feet long running from Norton Sound to a turning basin 250 feet wide by 600 feet long, located at the confluence of the Snake River with Dry and Bourbon Creeks. The entrance was flanked seaward by a 400 foot eastern jetty and a 240 foot western jetty and protected through its length by a wood sheet pile revetment on both sides. In the early 50s, the wood was refaced with steel sheet pile. This original project, except for the inner harbor sheet pile walls, and turning basin was approved for demolition by the Water Resources Development Act of 1999 based on the Chief of Engineers report dated 8 June 1999 and amended on 2 August 1999. A PCA was executed 28 May 2002 and on 30 September 2003 a \$35,878,300 contract was awarded to the Kiewitt-Manson JV for improvements consisting of a 3,025 foot attached rubblemound breakwater located east of the existing causeway and a 270 foot rubblemound spur extending out from the end of the causeway. In FY 2006, Kiewitt-Manson JV completed the spur breakwater, the main breakwater, all the dredging, the bridge, and filled the old entrance channel. The eastern waterfront is protected by a 3,350-foot long seawall that extends from the eastern jetty.

**Local cooperation.** Fully complied with.

**Terminal facilities.** In July 1984, the city of Nome received Department of Army authorization (permit) to construct a 3,600-foot gravel filled causeway. Construction of the causeway began in July 1985. Due to lack of funding, the length of the causeway was shortened to 2,700 feet. Construction was completed in May 1987.

**Accomplishments during fiscal year.** Annual maintenance dredging was carried out in the newly completed entrance channel in June with the removal of 30,000 cubic yards by Portable Hydraulic Dredging of Portland, Oregon under the first year of a 3-year IFB contract.

## 10. ST. PAUL HARBOR, AK

**Location.** St. Paul Island Harbor is located on the shore of Village Cove, the southern side of St. Paul Island, the largest and most populated island of the Pribilof group in the central southeast Bering Sea .

**Existing project.** Congress authorized improvements to the breakwater, the entrance channel, and the maneuvering area in WRDA of 1996. A small boat harbor was authorized in WRDA 1999. The construction contract for Phase I to build the three underwater reefs was awarded 19 March 1999 for \$10,411,000 and completed in August 2001. A severe scour at the toe of the main breakwater was identified in the spring of 2001. The Phase I contract was modified to repair the scour, but the contractor was able to complete a small portion of the repair at a cost of approximately \$8 million. The Phase II construction contract for dredging the harbor and completion of the scour repair was awarded to Kelly Ryan Construction on 27-June-2003 for \$26,279,960.

**Local Cooperation.** A Project Cooperation Agreement was executed on November 24, 1998. It was amended on September 29, 2006 to add the small boat harbor.

**Accomplishments during fiscal year.** Construction was completed September 2005. A small boat harbor was authorized in WRDA 99 and will be in a Phase III construction contract.

## 11. SAND POINT, AK

**Location.** Sand Point is a commercial fishing community on the Pacific coast off the southwestern Alaska Peninsula. Sand Point is about 570 air miles southwest of Anchorage and about midway between Kodiak and Dutch Harbor. The harbor provides close access to one of the State's most productive fishing areas. For the past few years, the population has been stable at around 1,000. The economy is based wholly on commercial fishing.

The harbor currently provides no permanent protected moorage for vessels larger than 80 feet. In recent years, the fleet operating in the Bering Sea/Aleutian Island area, made up primarily of vessels ranging from 80 to 160 feet, has grown significantly. Skippers fishing in the Sand Point area currently travel long distances to secure protected moorage.

**Existing project.** Project was authorized in WRDA 1999. The authorized harbor improvements at Sand Point consist of construction of a 570-foot and 370-foot breakwater from shore to form the basin and entrance channel of the new harbor. The crest height of the rubblemound breakwaters are to be +16 ft MLLW. The breakwaters are designed to withstand the forces of a 6.6 foot wave. The entrance channel is to be dredged to -18 ft MLLW, and 120 feet wide to allow one-way traffic of vessels 150 feet in length with a 34-foot beam and 10.5 foot draft. The mooring basin is to be dredged to a depth of -17 ft MLLW and would provide room for 37 vessels.

**Local cooperation.** PCA was executed 17 Nov 2004.

**Accomplishments during the fiscal year.** A construction contract was awarded to Western Marine Construction for \$10,905,240 to perform the work and was scheduled for completion in September 2006. The contractor completed the contract in FY 2007. Eider surveys will be conducted as mitigation annually until FY 2011.

## 12. SEWARD HARBOR, AK

**Location.** Seward, located on the Kenai Peninsula is about 125 miles south of Anchorage, Alaska by road. The town is located at the northern end of Resurrection Bay off the Gulf of Alaska and can be reached by air, sea, rail, and road. It lies at about 60 degrees 6 minutes N Latitude and 149 degrees 2 minutes W longitude.

**Existing Project.** The current harbor is filled to capacity with a waiting list of more than 330 boats. Expansion of the harbor was authorized in WRDA of 1999. The project expanded the existing harbor eastward to accommodate 339 additional vessels. Wave conditions within the harbor will require an extension of the outer breakwater to be built in a subsequent year.

**Local cooperation.** PCA was executed 13 Jun 2003.

**Accomplishments during the fiscal year.** The construction contract was completed in 2006. The contract provided a breakwater that is 215 feet short of requirement. Additional work is required.

## 13. SITKA HARBOR, AK

**Location.** The city of Sitka is located in southeastern Alaska, about 95 miles south-west of Juneau. It is situated on the western coast of 1,600 square mile Baranof Island. Sitka is about 20 miles from the open Pacific Ocean on the east side of Sitka Sound

**Existing project.** The project consists of three rubblemound breakwaters constructed across the northern end of the western anchorage, and inner harbor facility placed adjacent to Thomsen Harbor. This project created a large protected harbor in which moorage basins could be developed using minimal or no wave protection structures. The three breakwaters are 480 feet, 1,200 feet, and 320 feet long. Navigation openings in the breakwater 325 feet and 190 feet wide at the design depth, are located at natural channels where water depths are 50 to 55 feet at mean lower low water. Two gaps allow for vessel traffic separation, which may be particularly important when log rafts or barges are being towed through the western anchorage. The two breakwaters forming the southern opening overlap to

minimize ocean swell in Thomsen Harbor. The breakwaters are placed directly on the submerged rock reefs forming the northern boundary of western anchorage. The Channel Rock Breakwaters were physically completed in 1995. During construction 192,318 cubic yards of core rock, 65,330 cubic yards of secondary rock, 52,867 cubic yards of armor stone were placed. Construction was completed in June 1996. A study of the breakwater effect on the herring population was completed in 1998 and showed no ill effects on the fish population

**Local cooperation.** The Project Cooperation Agreement was executed 7 December 1993.

**Accomplishments during the fiscal year.** A project deficiency report is being prepared and additional modeling runs of an existing physical model was conducted.

#### 14. WRANGELL HARBOR, AK

**Location.** Wrangell Harbor is located on the northwest side of Wrangell Island, 824 miles from Seattle and 160 miles from Juneau. (See U.S. Coast and Geodetic Survey Charts Nos. 8164, 8161, and 8201.)

**Existing project.** The project consists of a rubblemound breakwater 300 feet long to protect the southern portion of the outer harbor; a mooring basin 600 feet long, 400 feet wide, and 10 feet deep below mean lower low water within the protected area; an inner basin in the tide flat area east of Shakes Island, 325 feet wide and 550 feet long; a connecting channel 120 feet wide and approximately 530 feet long; a connecting channel 120 feet wide and approximately 530 feet long from the outer mooring basin all at a depth of 10 feet at mean lower low water; and construction of a rock mound breakwater 320 feet long on the reef north of Shakes Island. The range between mean lower low water and mean higher high water is 15.7 feet. The extreme tidal range is 26 feet. Heavy swells, dangerous to small fishing boats, are caused by the wind, which causes an additional rise of about one foot.

Construction of the breakwater north of Shakes Island was placed on inactive status as material to be used from the inner basin was unsuitable and the breakwater considered unnecessary for safe moorage of vessels. The cost of this portion was last revised in 1956 and estimated to be \$6,500. (See table 40-B for authorizing legislation.)

The Heritage Harbor was authorized to be built in the Cemetery Point site in WRDA 99 following the feasibility study that was initiated in FY 1997. This project will consist of two breakwaters and dredging an entrance channel and inner harbor area. The PCA was executed on 7-March-2003 and the

construction contract awarded to Kiewit Pacific Company on 11-July-2003 for \$13,841,550.

**Local cooperation.** The Project Cooperation Agreement was executed on 7 Mar 2003.

**Terminal facilities.** There are eight wharves and floats in Wrangell Harbor. Two privately owned wharves serving general cargo and passenger terminals, one of which includes a cold storage facility, are open for public use. The remaining wharves serve various industrial purposes. One of the floats is publicly owned and is open for public use for mooring and servicing of small craft, and two privately owned floats serve oil-handling facilities.

**Accomplishments during fiscal year.** We coordinated with the local sponsor on their proposed Water Resources Development Act language to convert the local inner harbor facilities to General Navigation Features.

#### Flood Control

#### 15. BETHEL BANK STABILIZATION, AK

**Location.** Bethel, AK is located in southwestern Alaska on the north bank of the Kuskokwim River 400 miles west of Anchorage.

**Existing project.** The project consists of rock riprap toe protection installed on the unprotected riverbank and at locations where existing city construction bulkheads are threatened by erosion. This includes 4,000 feet of unprotected riverbank and 4,200 feet of previously installed bulkheads. The construction contract was awarded on 26 May 1995. Emergency erosion protection for the Bethel Cargo Dock and completed in September 1997. The Mission Road Bulkhead began in July 1995 and continued through FY 1995 due to accelerated erosion that accumulated after spring runoff. A FY 2001 Congressional Add authorized and directed the Corps to extend the existing project an additional 1,200 feet upstream. The total project cost was \$24,000,000 of which Bethel contributed \$6,000,000.

**Location cooperation.** A Project Cooperation Agreement was signed on 3 March 1994. An amendment was signed in December 2002 to extend the project 1,200 feet upstream.

**Terminal facilities.** The POL tank farm is situated at the downstream end of the project and the city's general cargo dock is at the upstream end of the project.

**Accomplishments during fiscal year.** Phase I of the project extension, placement of rip rap at the toe of the existing bulkhead, was completed in September 2007.

## 16. CHENA RIVER LAKES, AK

**Location.** Chena River Lakes is located in the vicinity of Fairbanks, AK, and encompassing the Tanana River, Chena River, Little Chena River, and their tributaries. (See USGS map Fairbanks, C1, D1, D2, and Big Delta D6.)

**Local cooperation.** Fully complied with.

**Existing project.** Moose Creek is located 17 miles east of Fairbanks with control works on the Chena River. The dam itself extends from a bluff one mile north of the Chena River and south past the control works for approximately seven miles to the Tanana River. The dam connects with a completed 22 mile levee system along the north boundary of the Tanana River to a point south and west of Fairbanks.

**Accomplishments during fiscal year.** The project celebrated its 27<sup>th</sup> anniversary of regulating the Chena River during the 2007 flood season. Peak flow at the Project occurred on August 8, 2007 with approximately 5,400 cubic feet per second passing through the dam, well below the operating threshold. There were no subsequent high water or debris events for the year. In September during a routine operational exercise of the dam gates, it was discovered that there had been substantial damage to one of the gate's support ear caused by a sheared latch pin assembly pin. The dam tender discovered the damage, diagnosed the problem and developed a repair strategy for repairing the damaged gate components. The repair was accomplished in short order and the dam remained operational throughout the repair process. Work also began to prepare the outlet works structure for the installation of remote cameras for use in operations, security, and future public use.

The Chena Project welcomed Sandi Zarfoss as the new administrative assistant in April. Senior Park Ranger, Tim Feavel, returned to duty in September after serving with his U.S. Army Reserve unit in Iraq for a year. LTC Feavel was the Base Engineer for Anaconda Camp. Two Project employees received firearms trainer certifications to serve as Alaska District bear awareness/safety training instructors. The fifth annual Paralyzed Veterans Association Moose Hunt conducted in September was a great success. Two of the three hunters were successful in taking a bull moose during the last hour of the last day of their hunt. Art Bartman of Bechtelsville, PA and Car Flemons of Somerville, AL enjoyed success. This was the first time that more than one moose was harvested in a year by the paralyzed hunters.

Project personnel worked cooperatively with the Alaska Department of Fish and Game to bring two highly publicized special events to the Chena Project, including a youth conservation camp and women's wilderness field camp hunter event.

The Project hosted its annual Snow Machine Rendezvous and Safety Day event, the Moose Creek Dam Salmon Watch and continued to promote and interpret Project missions at the Tanana Valley State Fair, local parades, and through formal dam tours.

## 17. DILLINGHAM EMERGENCY BANK STABILIZATION

**Location.** Dillingham is located 350 miles southwest of Anchorage, Alaska. The project is located along the southeastern edge of Dillingham adjacent to the Nushagak River. Erosion of the toe of the bluff in this area was endangering critical utilities and numerous buildings and homes. Erosion at the west entrance to the harbor is endangering the facilities and vessels.

**Existing project.** The authorized project consists of a 1,600-foot long steel sheet pile bulkhead along the toe of the bluff from the Dillingham City Cargo dock to Snag Point. An additional 600 feet of bulkhead with riprap revetment was constructed at the east side of the entrance to the harbor. The sheet pile wall was constructed to an elevation of 28 feet MLLW. Mitigation measures including emergency access ladders and eyebolts for anchoring set nets used for by subsistence fishermen are included in the project. Extension of the project to the west entrance to the harbor was directed in the FY 2001 Appropriation Conference Report.

**Local cooperation.** A Project Cooperation Agreement with the City of Dillingham Alaska was signed in January 1998 and will be amended to incorporate the project extension.

**Terminal Facilities.** Dillingham has a general cargo dock and a fuel facility adjacent to the authorized project.

**Accomplishments during fiscal year.** Designs for extending the wall are being evaluated. A decision document is being developed to identify the scope and cost of the extension prior to preparing a PCA.

## 18. GALENA EMERGENCY BANK STABILIZATION

**Location.** Galena is located on the north bank of the Yukon River, 45 miles east of Nulato and 270 air miles west of Fairbanks.

**Existing project.** The original project was authorized by Sec 116 of P.L. 99 – 190 (1985). It consists of a rock revetment along the Yukon River to protect the City of Galena from river erosion. In 1987, the Corps of Engineers constructed 1300 feet of riprap revetment protection along the river. However, bank erosion continued to threaten homes businesses upstream of the project. Section 1 (a) (2) of P.L. 106 – 337 Conference Report 106 – 988, directed the Corps to construct additional bank stabilization measures at Galena. Approximately 1600 feet of additional revetment was constructed upstream of the original project in 2005.

**Local cooperation.** The PCA for the original project was executed 28 April 1987. The PCA for the additional revetment protection was executed 6 Aug 2003.

**Accomplishments during fiscal year.** No activities this FY.

## 19. KAKE DAM

**Location.** The city of Kake is located in southeast Alaska on the northwest shore of Kupreanof Island and has a population of approximately 700 residents, about 95 percent of which are Alaska natives. It is a Tlingit village with a fishing, logging, and subsistence lifestyle.

**Existing project.** Project is to construct a replacement dam on Gunnuk Creek in Kake, AK to provide drinking water and hydroelectricity. The recommended plan calls for construction of a gravity concrete dam approx. 53 feet upstream from the previous dam, covering an area about 4,750 ft<sup>2</sup>, and a spillway height of 23 feet.

**Local cooperation.** PCA was executed 3 September 2004. The project will be 100 percent federally funded with the Sponsor providing all of the necessary LERRD. The project will be turned over to the City of Kake for operation and maintenance after construction completion.

**Accomplishments during fiscal year.** A contract was awarded to Kiewit Pacific for \$7,219,050 on 28 January 2005.

Construction continued with the completion of the concrete work. The contract was completed April 2007. Design for miscellaneous stair work was ongoing in FY 2007.

## 20. TRIBAL PARTNERSHIP PROGRAM

**Location:** Studies to define erosion problems and solutions are authorized in the following communities: Kaktovik, Shishmaref, Bethel, Dillingham, Unalakleet, Kivalina, and Newtok, Alaska. A Statewide Baseline Erosion Study is also authorized to evaluate erosion.

**Existing project:** Authorized work includes four feasibility studies to study erosion at Kivalina, Shishmaref, Newtok, and Unalakleet, Alaska and three general studies, including a Cultural Resources and erosion near Kaktovik, the Statewide Baseline Study (Erosion), and a Data Gathering Study.

**Local cooperation:** The four feasibility studies have been approved under the cost sharing provisions of Section 117 of PL 108-447. Both the tribal government and the state-subdivision government have provided resolutions (often joint resolutions) supporting the project in each community with an active project.

**Accomplishments during the fiscal year:** Completed gathering of historical wind data for western Alaska storms and initiated wave modeling studies. Completed soils drilling effort at Newtok. Restarted the Statewide Baseline Study and funded it for the first quarter FY-09 Completion.

## 21. ALASKA COASTAL EROSION, AK

**Location:** Kaktovik, Barrow, Point Hope, Kivalina, Shishmaref, Unalakleet, Koyukuk, Bethel, and Newtok, Alaska are all eligible sites for this project.

**Existing project:** The existing approved projects consist of 3,150 lineal feet of rock revetment Shishmaref, Alaska, 1,500 lineal feet of rock revetment at Unalakleet, Alaska, and 3,300 lineal feet of rock revetment at Kivalina, Alaska. Decision documents are being developed for the remaining eligible sites.

**Local cooperation:** Project Cooperation Agreements have been signed with the City of Shishmaref, Alaska (17 July 2006), the City of Unalakleet, Alaska (22 January 2007), and the City of Kivalina (29 November 2007) under the provision of Section 117 of PL 108-447.

**Accomplishments:** During the fiscal year we completed the decision document for Kivalina and made progress on two other decision documents for Newtok and Koyukuk. Design and real estate acquisition for the initial construction phase at Shishmaref, and design documents for work at Unalakleet; award and initiation of construction for 625 feet of revetment at Shishmaref, Alaska. Due to weather, the construction contractor at Shishmaref was only able to place 450 feet of the contracted 625 feet of revetment.

Feasibility Studies: \$5,084 for Port Lions, \$28,161 for Valdez, \$143,859 for Barrow, \$235,308 for DeLong Mountain, and \$65,636 for PAS-Planning Assistance to States.

## 22. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

**Emergency flood control activities--repair, flood fighting, and rescue work (Public Law 99, 84th Congress, and antecedent legislation).**

Federal costs for the fiscal year were \$1,072,537 for disaster preparedness, and field investigations. National Emergency Preparedness Program costs totaled \$15,000. Yakutat Hubbard Glacier – A Project Information Report was developed on the projected flood concerns at Yakutat caused by the continuing forward movement of Hubbard Glacier and the potential result of Russell Fiord releasing water into the Situk River. Funding to verify the hazard and define a technically feasible solution was received in the 4<sup>th</sup> Quarter of FY07. We expended \$830,000 to provide emergency erosion and flood relief to the City of Kivalina after their seawall failed in September 2006. The funds were expended procuring sand bags and super sacks, a bulldozer, a front-end loader, and an excavator. We also provided technical and design assistance for proposed protective wall which the City was eventually unable to fund.

## 23. INSPECTION OF COMPLETED FLOOD CONTROL PROJECTS

Inspections were made of the following flood control works: Bethel Bank Stabilization at Bethel; Deering Streambank Protection at Deering; Metlakatla Erosion Protection at Metlakatla; Homer Spit Revetments at Homer; Tanana River Levee at Fairbanks, Talkeetna River at Talkeetna; Lowell Creek at Seward; Klutina River at Copper Center; Skagway River at Skagway; Gold Creek at Juneau; and Emmonak Streambank Protection on the Yukon River at Emmonak. An inspection was made of the shore protection works at Nome. FY07 costs were \$48,315.

## GENERAL INVESTIGATION

### 24. SURVEYS

Fiscal year costs were \$5,097,995 of which \$3,122,926 was for navigation studies, \$342,853 for flood damage prevention studies, \$681,548 for shoreline protection studies, \$537,779 for special studies, \$248,390 for ecosystem restoration studies, \$0 for watershed comprehensive studies, \$57,206 for miscellaneous studies, and \$107,293 for coordination studies with other agencies. In addition contributed funds in the amount of \$478,048 were expended for General Investigation's

## 25. COLLECTION AND STUDY OF BASIC DATA

Technical assistance, information, flood plain management guidance, and other flood plain management services have been provided to military and nonmilitary Federal agencies, local communities, state agencies, Architectural Engineering firms, lending institutions, and private individuals at a fiscal year cost of \$132,067.

Fiscal year costs for flood plain management services \$124,921, and Hydrologic Studies were \$7,146.

## 26. PRECONSTRUCTION ENGINEERING AND DESIGN

Fiscal year costs were \$775,559 of which \$232,436 for Akutan, \$32,616 for Haines Harbor, and \$419,735 for Unalaska, \$90,772 for Coffman Cove. In addition, contributed funds of \$4,117 were expended for Akutan, \$25,207 for Haines, and \$53,348 for Unalaska.

## 27. SPECIAL PROJECTS

Alaska Environmental – Coordination with multiple State and Federal agencies on design consideration has been provided to the City of Buckland on its water and sewer project. A proposal to integrate Alaska Erosion design and construction activities into the ongoing State led activities was well received. This work will start in FY08 pending agreements between the State and the District. FY07 costs were \$14,298 and \$10,183 in contributed funds.

## 28. GENERAL REGULATORY FUNCTIONS

Permit Evaluation	\$5,589,249
Enforcement	810,774
Compliance – Authorized Activities	<u>593,171</u>
Total Regulatory	\$6,993,194

REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2007

**TABLE 32-A COST AND FINANCIAL STATEMENT**

See Section In Text	Project	Funding	FY 04	FY 05	FY 06	FY 07	Total to 30 Sep 07
1.	Anchorage Harbor, AK	New Work					533,235
		Approp. Cost					533,235
		Maint. Approp.	12,874,000	11,387,338	11,311,000	10,729,000	99,156,335
		Cost	13,950,612	10,812,216	10,363,760	7,852,612	96,811,713
	(Contrib. Funds)	New Work Contrib. Cost					638,000
							638,000
2.	Chignik Harbor, AK	New Work					
		Approp. Cost	1,150,000	2,527,000	12,200	3,951,000	14,201,644
		Maint. Approp. Cost	1,833,492	2,529,971	36,180	210,243	10,275,558
	(Contrib. Funds)	New Work Approp. Cost	416,804	300,000	2,251	2,103,932	3,398,231
				333,395		203	863,143
3.	Cook Inlet Navigation, AK	New Work					
		Approp. Cost					8,716,744
		Maint. Approp. Cost	429,000	-4,878			594,579
		Cost	403,911	10,920	-5,968	5,968	590,288
	(Contrib. Funds)	New Work Approp. Cost					2,498,971
							2,498,971
4.	Cordova Harbor	New Work					
		Approp. Cost					9,498,122
		Maint. Approp. Cost			533,000	235,000	1,175,056
		Rehab Approp. Cost			31,164	79,200	515,420
	(Contrib. Funds)	New Work Approp. Cost					4,811,891
							4,811,891
		Rehab Approp. Cost					675,000
							675,000
5.	Dillingham Harbor, AK	New Work					
		Approp. Cost					1,060,678
		Maint. Approp. Cost	694,000	717,089	819,000	636,000	16,463,565
		Cost	695,936	717,838	766,546	670,621	16,458,734
	(Contrib. Funds)	Maint. Approp. Cost					1,700
							1,700

ALASKA, AK, DISTRICT

**TABLE 32-A COST AND FINANCIAL STATEMENT**  
(Continued)

See Section In Text	Project	Funding	FY 04	FY-05	FY 06	FY 07	Total to 30 Sep 07
6.	False Pass Harbor, AK	New Work	-35,000	792,000	8,930,000	7,500,000	17,831,987
		Approp.	82,178	244,698	3,863,642	5,562,961	10,277,256
	(Contrib. Funds)	New Work					
		Approp.			2,000,000	555,000	2,749,457
		Cost		50,780	5,481	2,903	195,783
7.	Homer Harbor, AK	New Work					3,486,677
		Approp.					3,486,677
		Cost					
		Maint.					
		Approp.	353,000	397,974	397,000	358,000	8,735,884
		Cost	352,548	398,265	318,119	185,611	8,669,793
		Contrib.					
		Approp					10,021,437
		Cost					10,021,437
		Rehab					
		Approp					67,974
		Cost					67,974
8.	Ninilchik Harbor, AK	New Work					838,275
		Approp.					838,275
		Cost					
		Maint.					
		Approp.	223,000	230,337	274,000	264,000	7,395,299
		Cost	222,964	230,374	220,802	301,281	7,379,382
9.	Nome Harbor, AK	New Work					
		Approp.	18,670,416	16,268,000	10,870,000	-500,000	47,906,114
		Cost	18,821,905	16,034,558	3,863,954	1,920,415	43,075,495
		Maint					
		Approp.	493,000	3,213,131	2,582,000	5,875,000	28,356,244
		Cost	370,415	775,226	4,945,728	1,070,855	23,351,455
	(Contributed Funds)	New Work					
		Approp.	1,771,398	2,300,000	376,037	215,467	4,776,071
		Costs	1,569,871	584,785	1,527,909	327,881	4,080,986
		Maint					
		Approp.					187,500
		Cost					187,500
10.	St. Paul Harbor, AK	New Work					69,350,784
		Approp.	17,062,584	9,049,000	4,293,000	4,500,000	62,689,459
		Cost	17,098,398	8,291,483	1,310,198	2,167,925	
		Maint.					1,023,428
		Approp.	586,000	964			1,023,429
	(Contrib. Funds)	Cost	596,334	1,631			
		New Work					5,048,988
		Approp.	1,400,000	654,000			5,048,988
		Cost.	1,401,538	654,000	-220,000	220,000	

**TABLE 32-A COST AND FINANCIAL STATEMENT**

REPORT OF THE SECRETARY OF THE ARMY ON CIVIL WORKS ACTIVITIES FOR FY 2007

(Continued)

See Section In Text	Project	Funding	FY 04	FY-05	FY 06	FY 07	Total to 30 Sep 07
11.	Sand Point	New Work	73,000	2,553,000	6,455,000	2,000,000	11,798,334
		Approp.	203,800	1,100,481	7,519,644	1,687,135	11,024,974
		Cost					
	(Contrib. Funds)	New Work					
		Approp.		1,499,000			1,599,000
		Cost			1,400,000	36,178	1,536,164
12.	Seward Harbor	New Work	2,373,000	4,915,000		4,000	10,768,787
	(Contributed Funds)	Approp.	3,102,614	4,891,282	25,581	-194,065	9,605,478
		Cost					
		New Work		2,160,000			2,242,500
		Approp.	56,697	192,870	861,645	376,794	1,507,645
		Cost					
		Maint.					544,245
		Approp					544,245
		Cost					
13.	Sitka Harbor, AK	New Work	63,000	889,000		104,000	9,306,117
	(Contributed Funds)	Approp.	28,783	450,177	283,719	145,400	9,158,197
		Cost					
		New Work					
		Approp.					1,228,915
		Cost					1,228,915
		Maint.					
		Approp					129,329
		Cost					129,329
14.	Wrangell Harbor, AK	New Work					
		Approp.	6,378,317	5,740,000			13,595,337
		Cost	6,371,342	5,585,838	137,089		13,515,403
		Maint.					
	(Contrib. Funds)	Approp.	75,000	-37			1,121,339
		Cost	10,191	64,772			1,121,339
		New Work					
		Approp.	841,000	2,706,000			3,697,000
		Cost	773,794	2,096,617	27,556	7,877	3,064,416
15.	Bethel Bank Stabilization	New Work					
	(Contributed Funds)	Approp.	-50,000	200,000	4,712,000		23,811,000
		Cost	31,195	24,868	71,892	4,038,128	23,035,746
		New Work					
		Approp.	1,768		770,000	225,000	6,000,000
		Cost			52,656	782,037	5,423,917

ALASKA, AK, DISTRICT

**TABLE 32-A COST AND FINANCIAL STATEMENT**  
(Continued)

See Section In Text	Project	Funding	FY 04	FY 05	FY 06	FY 07	Total to 30 Sep 07
16.	Chena River Lakes, AK	New Work					
		Approp.	55,000				214,148,765
		Cost	20,031	7,974	9,178	5,810	213,830,003
		Maint.					
		Approp.	1,332,000	1,949,386	2,430,000	1,492,000	38,141,736
		Cost	1,464,503	1,613,306	1,759,713	1,212,561	36,795,325
	(Contributed Funds)	Approp.					2,382,929
		Cost					2,382,929
17.	Dillingham Emergency Bank Stabilization	New Work					
		Approp.	240,000	529,000	2,970,000		9,673,515
		Cost	360,720	386,499	533,789	158,669	7,178,757
	(Contributed Funds)	New Work					
		Approp.					
		Cost					
18.	Galena Emergency Bank Stabilization	New Work					
		Approp.					6,966,431
		Cost	1,408,481	3,176,957	36,835	18,440	5,998,325
	(Contributed Funds)	New Work					
		Approp.					1,721,000
		Cost					1,721,000
19.	Kake Dam, AK	New Work					
		Approp.	140,000	5,400,000	3,550,000	1,740,000	12,740,915
		Cost	281,249	2,713,144	3,284,279	3,806,363	11,788,798
	(Contrib. Funds)	Maint.					
		Approp.					
		Cost					
20.	Tribal Partnership Program	New Work					
		Approp.	900,000	2,000,000	349,543	1,820,000	5,569,543
		Cost	726,143	1,317,844	1,092,665	1,027,888	4,180,382
		Maint.					
		Approp.					
		Cost					
21.	Alaska Coastal Erosion, AK	New Work					
		Approp.			2,376,000	7,500,000	9,876,000
		Cost			336,178	4,984,168	5,320,346

**Table 32-B AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
1.	Jul. 3, 1958 Oct. 22, 1976	<b>ANCHORAGE HARBOR, AK</b> Deep winter harbor, adjacent to docks, dredge to 35 feet below mean lower low water, protected by two jetties. <sup>1</sup> Extension of project limits.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup> P.L. 94-587
3.	Oct. 12, 1996	<b>CHIGNIK HARBOR, AK</b> Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.	P.L. 104-303, Water Resources Development Act of 1996. FY 1999 Congressional Add
3.	Oct. 12, 1996	<b>COOK INLET NAVIGATION, AK</b> Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.	Section 101(b)(2), Water Resources Development Act of 1996. Energy and Water Development Appropriations Act, 1999. P.L. 105-245.
4.	Aug 30, 1935 June 29, 1978	<b>CORDOVA HARBOR</b> The initial project included a sheltered small boat harbor of 8.26 acres with a depth of -10 feet MLLW protected by north and south breakwaters of 1,100 feet and 1,400 feet respectively, with provision for a future expansion of 10.4 acres to -14 feet MLLW.  In 1981 the harbor was expanded to 20 acres by the removal of the 1,400 foot breakwater, the construction of a 2,000 foot breakwater, and an increased depth for the entrance and access channel to -16 feet MLLW.	Rivers and Harbors Act, 30 August 1935 (R & H Committee Doc. 33, 73rd Congress, 2nd Session) as adopted,  River and Harbor Act of 14 July 1960, Section 107, P.L. 86-645
5.	Jul. 3, 1958	<b>DILLINGHAM HARBOR, AK</b> Basin 230,000 square feet in area with depth of 2 feet above MLLW along Scandinavian Creek, with entrance channel 1,100 feet long and 40 feet wide.	H. Doc. 390, 84th Cong., 2d Sess. <sup>2</sup>
6.	Oct. 31, 2000	<b>FALSE PASS HARBOR, AK</b> Dredging of the inner basin and the entrance channel to accommodate a fleet of 88 vessels in a 5.2 acre basin protected by two rubble-mound breakwaters, 1,300 feet and 600 feet in length.	House Report 106-1020, Section 101 (b)(1) (2), Water Resources Development Act of 2000, 106 <sup>th</sup> Congress
7.	Jul. 2, 1958 Aug. 19, 1964	<b>HOMER HARBOR, AK</b> Basin 2.7 acres in area with depth of 12 feet below mean lower low water, and rock breakwater 1,260 feet long. Relocation and rehabilitation of project destroyed by March 27, 1964 earthquake, by construction of basin 10 acres in area with 12-foot depth over 2.75 acres and 15-foot depth over 7.25 acres protected by rock breakwaters, 1,018 feet and 238 feet long.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup>  P.L. 88-451
	Jul. 14, 1960	Increased width and depth of entrance channel and an enlarged staging area. Basin enlarged from 16.5 to 50 acres.	Section 107, P.L. 86-645 Authorized by Chief of Engineers, Nov. 13, 1981

## ALASKA, AK, DISTRICT

Table 32-B  
(Continued)

## AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
8.	Jul. 3, 1958	<b>NINILCHIK HARBOR, AK</b> Basin 320 feet long by 150 feet wide with depth of 2 feet above mean lower low water, approach channel 400 feet long and 50 feet wide with depth of 9 feet above mean lower low water, protected by 410 foot jetty.	H.Doc. 34, 85th Cong., 1st Sess. <sup>2</sup>
9.	Aug. 8, 1917 Aug. 30, 1935 Jun. 16, 1948 Aug 17, 1999	<b>NOME HARBOR, AK</b> Two jetties, easterly 335 feet and westerly 460 feet long re-vetment, channel and basin 200 feet wide and 250 feet long. Extension of the jetties and enlarging basin to 250 feet wide and 600 feet long. <sup>3</sup>  Seawall  New entrance to Nome Harbor; 3,025 feet-long breakwater; 270 feet-long causeway spur; 3,450 feet-long entrance channel with depth to 22 feet; sediment traps and causeway bridge.	H.Doc. 1932, 64th Cong., 1st Sess. <sup>2</sup>  H.Doc. 404, 71st Cong., 2d Sess., and Rivers and Harbors Committee Doc. 38, 73d Cong., 2d Sess. Reports of Chief of Engineers dated March 8, 1948 Report of Chief of Engineers as amended, dated August 2, 1999. Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
10.	Nov. 17, 1986 Oct. 12, 1996 Aug 17, 1999	<b>ST. PAUL HARBOR, AK</b> Add 1,050 feet of breakwater at existing crest height, 37 below feet mean lower low water and 1,000 feet long with a crest height of 18 above mean lower low water.  Deepen the entrance channel to -30 feet. Enlarge and deepen the maneuvering basin to -29.0 feet with an area of 415 by 830 feet. Wave spending beach to +4 feet. Three offshore reefs each, 1,300 feet long, constructed to a depth of -12 feet. Wave energy channel 100 feet wide with bottom elevation of +2 feet.  Added small boat harbor with entrance channel and maneuvering area to -20MLLW and appropriate wave protection features.	Section 202, P.L. 99-662  Section 101(b)(3), P.L. 104-303 Water Resources Development Act of 1996. Section 302, P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
11.	Aug 17, 1999	<b>SAND POINT HARBOR, AK</b> Construct a mooring basin adjacent and south of the existing harbor. It incorporates the southern breakwater and causeway to the city dock by extending the existing breakwater.	Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
12.	Aug 17, 1999	<b>SEWARD HARBOR, AK</b> Provide more moorage space. Project would accommodate 339 additional vessels.	Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
13.	Oct 31, 1992	<b>SITKA HARBOR, AK</b> Boat harbor consisting of 3 rubblemound breakwaters.	Water Resources Development Act of 1992, H. Doc. 103-37, 103 <sup>rd</sup> Cong., 1 <sup>st</sup> Sess.

**Table 32-B**  
(Continued)

**AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
14.	Sep. 22, 1922 Aug. 30, 1935 Mar. 2, 1945 Aug 17, 1999	<b>WRANGELL HARBOR, AK</b> Breakwater 300 feet long to protect southern portion of harbor. Mooring basin 600 feet long, 400 feet wide, and 10 feet deep. Inner basin and connecting channel from the existing mooring basin, both 10 feet deep at mean lower low water, and breakwater 320 feet long on the reef north of Snakes Island. Project for navigation, Heritage Harbor, AK	H.Doc. 161, 67th Cong., 2d Sess.  H.Doc. 202, 72nd Cong., 1st Sess. H.Doc. 284, 76th Cong., 1st Sess. Section 101 (a) (3), P.L. 106-53 Water Resource Development Act of 1999, 106th Cong.
15.	Nov. 17, 1986	<b>BETHEL BANK STABILIZATION, AK</b> Streambank protection by placing riprap along 8,500 feet of riverbank and replacing tiebacks of existing pipe pile wall.	Section 202, P.L. 99-662
16.	Aug. 13, 1968	<b>CHENA RIVER LAKES, AK</b>  Provides for construction of a dam and floodway for the Chena River (17 miles east of Fairbanks) for a dam and reservoir on the Little Chena River, and for a 27 mile long levee system with interior drainage works on the north side of the Tanana River.	H. Doc. 148, 90th Cong., 2nd Sess. P.L. 90-483
17.	Dec. 19, 1985	<b>DILLINGHAM EMERGENCY BANK STABILIZATION, AK</b>  Install 1,600 feet of steel sheetpile bulkhead along the toe of the bluff from the Dillingham city cargo dock to Snag Point. Extension of the sheet pile wall on the west end of the entrance channel to the small boat harbor and replacement of the existing wooden bulkhead at the city dock.	Sec. 116 P.L. 99-190  Section 1(a)(2) P.L. 106-377 Conference Report 106-988
19.	Dec. 19, 1985	<b>GALENA EMERGENCY BANK STABILIZATION, AK</b>  The project protects approximately 1,800 LF by placing 28,000 cu. Yd. of armor rock, 288,000 sq. ft. filter fabric and 9,300 cu. yd. filter stone. A 3 ft thick layer of rip rap will extend from the top of the bank about elevation 123 ft. to elevation 90 ft.	Sec 116 P.L. 99-190
19.	Oct. 27, 2000	<b>KAKE DAM, AK</b>  The project consists of a gravity concrete dam at Kake approximately 53 feet upstream from the previous dam, covering an area about 4,750 square feet, and a spillway height of 17.7 feet. It includes an intake structure, complete with fish screen and trash rack, and would house intake lines for the city and hatchery water supply.	EWDA FY2001 PL 106-377 Modified in EWDA FY2004

ALASKA, AK, DISTRICT

**Table 32-B**  
(Continued)

**AUTHORIZING LEGISLATION**

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
20.	Dec. 11, 2000 Dec. 01, 2004 Dec. 08, 2004	<p><b>TRIBAL PARTNERSHIP, AK</b></p> <p>The project includes performing an analysis of the costs associated with continued erosion of Bethel, Dillingham, Shishmaref, Kaktovik, Kivalina, Unalakleet, and Newtok, defining potential costs associated with moving the affected communities to new locations (including collocation with existing communities), and identifying the expected time line for a complete failure of the useable land associated with each community. In addition expedited environmental studies to document the impacts of this severe and continuing erosion are required at Shishmaref. Additional work added in 2004 year includes a BaselineErosion Study, ongoing feasibility type studies at four communities, and general studies of Cultural Sites at Kaktovik and western Alaska wave climate definition</p>	<p>Section 203 WRDA FY2000</p> <p>Section 112 EWDA FY2004</p> <p>Section 117, Division C, Consolidated Appropriations Act 2005, (PL 108-447).</p>
21.	Oct. 19, 2005	<p><b>ALASKA COASTAL EROSION</b></p> <p>This project includes developing a decision document for each of the nine named communities. After approval of the decision document, a design for the solution may be developed. With approval of the Office of the Secretary of the Army, a Project Cooperation Agreement may be signed with the sponsor and the solution implemented at full Federal cost.</p>	EWDA, FY2006, PL 109-103

  

<p>1. Purchase of dredge and deepwater jetties deauthorized November 6, 1977 under section 12, Public Law 93-251.</p> <p>2. Contains latest published map.</p>	<p>3. Extension of jetties classified "inactive".</p> <p>4. Little Chena Dam deauthorized in 1991.</p>
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**TABLE 32-C OTHER AUTHORIZED NAVIGATION PROJECTS**

<b>Project</b>	<b>Status</b>	<b>For Last Full Report See Annual Report for</b>	<b>Cost to Sep 30, 2007 Construction</b>	<b>2007 Operation and Maintenance</b>
Apoon Mouth of Yukon River, AK <sup>1</sup>	Completed	1920	128,896	2,981
Bar Point Harbor, AK <sup>2</sup>	Completed	1983	2,000,000 <sup>3</sup>	
Bethel Small Boat Harbor, AK	Completed	1985	3,514,399	982,597
Cook Inlet Shoals, AK	Completed	1977	1,220,000	5,000
Cordova Harbor, AK <sup>2</sup>	Completed	1978	843,534	732,614
Cordova, AK	Completed	1986	9,642,000	
Craig Harbor, AK	Completed	1983	1,033,500 <sup>4</sup>	462,880
Douglas Harbor, AK	Completed	1963	282,019	768,240
Dry Pass, AK	Completed	1983	943,351	141,787
Egegik River, AK	Completed	1972	4,441	10,018
Elfin Cove, AK	Completed	1959	154,191	17,323
Gastineau Channel, AK	Completed	1964	789,461	194,446
Haines Harbor, AK <sup>2</sup>	Completed	1977	1,000,000 <sup>5</sup>	24,077
Hoonah Harbor, AK	Completed	1983	5,418,716 <sup>6</sup>	
Humboldt Harbor, AK	Completed	1977	3,679,683 <sup>7</sup>	284,936
Iliuliuk Harbor, AK	Completed	1941	66,037	1,800
Juneau Harbor, AK	Completed	1974	1,381,150	429,023
Kake Harbor, AK	Completed	1991	870,700	
Kasilof Harbor, AK <sup>2</sup>	Completed	1975	109,848	
Ketchikan Harbor, AK	Completed	1979	1,602,417	331,256
Kodiak Harbor, AK	Completed	1973	1,891,212 <sup>8</sup>	118,587
Mekoryuk, AK	Completed	1986	1,372,139	
Myers Chuck Harbor, AK	Inactive	1970	9,700	
Naknek River, AK	Completed	1961	20,789	265,557
Neva and Olga Straits, AK	Completed	1960	155,009	
Old Harbor, Kodiak Island, AK <sup>2</sup>	Completed	1972	370,415	425,312
Pelican Harbor, AK	Completed	1964	369,683	37,532
Petersburg Harbor, AK	Completed	1972	252,932	165,548
Port Alexander, AK	Completed	1949	17,000	594
Port Lions, AK <sup>2</sup>	Completed	1986	1,825,311	1,596,577
Rocky Pass, AK	Completed	1960	337,668	78,513
St. Michael Canal, AK	Completed	1916	377,062	560
Seldovia Harbor, AK	Completed	1974	1,051,883 <sup>9</sup>	61,061
Sergius Whitestone, AK	Completed	1973	1,798,010	7,154
Seward Harbor, AK	Completed	1973	712,369 <sup>10</sup>	544,689
Sitka Harbor, AK	Completed	1973	1,611,009	129,329
Skagway Harbor, AK	Completed	1972	133,180	108,190
Stikine River, AK	Completed	1987		241,250
Valdez Harbor, AK	Completed	1968	649,740 <sup>11</sup>	322,807
Wrangell Narrows, AK	Completed	1979	3,562,343	9,338,507

1. Abandonment recommended in H.Doc. 467, 69th Cong., 1st Sess.

2. Authorized by Chief of Engineers (Sec. 107).

3. In addition, \$272,779 of State funds.

4. Includes \$656,240 for Sec. 107 project.

5. In addition, \$925,500 of State funds.

6. In addition, \$973,875 of State funds.

7. In addition, \$857,000 of State funds.

8. Includes \$594,163 for rehabilitation.

9. Includes \$400,000 for rehabilitation.

10. Includes \$90,026 for rehabilitation and \$2,528 Code 710. Recreation facilities at Completed projects.

11. Includes \$73,000 for rehabilitation and \$2,713 Code 710. Recreation facilities at Completed projects.

## ALASKA, AK, DISTRICT

**TABLE 32-E OTHER AUTHORIZED FLOOD CONTROL PROJECTS**

<b>Project</b>	<b>Status</b>	<b>For Last Full Report See Annual Report for</b>	<b>Cost to Sep 30, 2007 Construction</b>	<b>Operation and Maintenance</b>
Bethel Bank, Kuskokwim River <sup>1</sup>	Completed	1985	553,970	
Fairbanks, Tanana River & Chena Slough, AK	Completed	1943	557,000	
Gold Creek, AK	Completed	1975	876,006 <sup>2</sup>	4,301
Klutina River, Copper Center, AK <sup>3</sup>	Completed	1973	260,681	
Lowell Creek, AK <sup>4</sup>	Completed	1945	416,382 <sup>5</sup>	2,039,959
Salmon River, AK	Completed	1963	37,770 <sup>6 7</sup>	162,925 <sup>8</sup>
Talkeetna River, AK	Completed	1981	516,694	

1. Section 14.

2. In addition, \$25,000 expended from contributed funds.

3. Authorized by Chief of Engineers (Sec. 205).

4. During FY88, \$551,690 was expended from FC and CE.

5. In addition \$25,000 expended from contributed funds.

6. Includes \$34,197 of PWA funds.

7. In addition, \$7,000 expended from contributed funds.

8. In addition, \$27,400 expended from contributed funds.

**TABLE 32-G DEAUTHORIZED PROJECTS**

<b>Project</b>	<b>For Last Full Report See Annual Report for</b>	<b>Date Deauthorized</b>	<b>Federal Funds Expended</b>	<b>Contributed Funds Expended</b>
Allison Lake, AK (Valdez Hydropower)		1992		
Anchorage Harbor, AK (Uncompleted Portion)	1967	1977		
Bradley Lake, AK 1983	1983	1982	46,701,000	
Ketchikan Harbor, AK (West Breakwater)	1979	1979		
Port Alexander, AK (Inner Harbor)	1949	1977		
Tolovana River, AK (Snagging)	1931	1977		
Little Chena River Dam	1983	1990		
Long Lake Dam	1975	1990		
Myers Chuck Harbor, AK	1970	1991	9,700	
Scammon Bay, AK		1992		
Skagway River, AK	1966	1991	26,385	

**TABLE 32-H**

**NAVIGATION WORK UNDER  
SPECIAL AUTHORIZATION  
NAVIGATION ACTIVITIES PURSUANT TO SECTION 107,  
PUBLIC LAW 86-645, AS AMENDED  
(PREAUTHORIZATION)**

Study Identification	Fiscal Year Costs
Coordination Account	12,229
Chefornak Navigation Imp	4,643
Cold Bay Navigation Imp	3,205
Douglas Harbor	159,455
Elim Navigation Imp	3,652
Gustavus Nav Imp	2,699
Iliamna	725
King Cove	4,769
Nanwalek	80,000
Port Graham, AK	2,284
Savoonga	15,597
Seward Marine Industrial	307
Teller Navigation	1,985
Williamsport	58
<b>TOTAL</b>	<b>211,608</b>

**TABLE 32-I**

**PROJECT CONDITION SURVEYS**

Name of Project Date	Date Survey Conducted
Cook Inlet Navigation Channel	August 2007
Ketchikan – Bar Point Harbor	May 2007
Ketchikan – Thomas Basin Hbr	May 2007
Craig Harbor	May 2007
Elfin Cove	May 2007
Metlakatla – New Harbor	May 2007
Metlakatla – Old Harbor	May 2007
Pelican	May 2007
Rocky Pass	May 2007
Wrangell – Heritage Harbor	May 2007
Wrangell – Old Harbor	May 2007
Wrangell Narrows – mapping only	May 2007
FY07 Total Costs:	\$350,922

**TABLE 32-J**

**STREAM BANK EROSION WORK UNDER  
SPECIAL AUTHORIZATION  
EROSION ACTIVITIES PURSUANT TO SECTION 14,  
PUBLIC LAW 79-526, AS AMENDED  
(PREAUTHORIZATION)**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Coordination Account	\$14,961
Chefornak Bank Prot	3,198
Kwethluk	19,353
Deering	39,309
Shishmaref	24,358
Seward	7,351
<b>TOTAL</b>	<b>\$108,529</b>

**TABLE 32-K**

**ENVIRONMENTAL ACTIVITIES  
PURSUANT TO SECTION 1135,  
PUBLIC LAW 99-662**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Coordination Account	\$4,916
Preliminary Restoration Plan	2,354
Gold Creek Salmon Restoration	17,067
<b>TOTAL</b>	<b>\$21,984</b>

**TABLE 32-L**

**AQUATIC ECOSYSTEM RESTORATION  
PURSUANT TO SECTION 206,  
PUBLIC LAW 104-303**

<b>Study Identification</b>	<b>Fiscal Year Costs</b>
Coordination Account	\$4,988
Preliminary Restoration Plan	2,354
Duck Creek Restoration	4,421
Chester Creek Restoration	25,385
Northway	11,304
Black Lake Ecosystem	41,946
Eklutna, AK	253,175
<b>TOTAL</b>	<b>\$343,573</b>

**TABLE 32-L**

**COASTAL STORM DAMAGE REDUCTION  
SHORE PROTECTION  
SECTION 103,  
PUBLIC LAW 87-874**

Study Identification	Fiscal Year Costs
Coordination Account	\$17,679
Nome Shoreline Protection	1,406
Point Hope	957
Unalakleet Storm Damage	33,498
<b>TOTAL</b>	<b>\$53,540</b>

**TABLE 32-L**

**FLOOD DAMAGE REDUCTION  
SECTION 205,  
PUBLIC LAW 80-858**

Study Identification	Fiscal Year Costs
Coordination Account	\$18,118
Fort Yukon Flood Control	3,353
Salcha Flood Damage Reduction	4,105
<b>TOTAL</b>	<b>\$25,576</b>

**TABLE 32-L**

**BANK STABILIZATION  
SECTION 116,  
PUBLIC LAW 99-190**

Study Identification	Fiscal Year Costs
Dillingham Emergency Bank Stabilization	\$158,669
<b>TOTAL</b>	<b>\$158,669</b>