

KACHEMAK BAY WETLANDS CONSERVATION PROJECT, ALASKA

PROJECT OFFICER:

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LATITUDE/LONGITUDE:

59° 30'N latitude and 151° W longitude.

DATE SUBMITTED:

August 2, 1999

CHECK-OFF SECTION:

- YES NO Did you use the most current version of the U.S. Standard Grant Application Instructions booklet and disk to complete the proposal?
- YES NO Did you contact a North American Waterfowl Management Plan Joint Venture Coordinator during proposal development?
- YES NO Did you send a copy of the completed proposal to the Joint Venture Coordinator?

YOUR COMMENTS:

This proposal is a re-submission of a proposal originally submitted in March 1999. Based on the comments of NAWCA staff, the proposal has been significantly strengthened by removing some acquisition properties from the original proposal that staff felt did not meet NAWCA grant standards and replacing with other wetland properties of higher ecological value and lower cost per acre. For example, the previous proposal sought grant funds for purchase of 178 acres at \$5,500/acre; the current proposal seeks grant funding to purchase 726 acres at a cost of \$1,138/acre. Additions to the proposal include the two most important Aleutian tern nesting colonies in Kachemak Bay.

The proposed acquisitions all build on past work of The Nature Conservancy and partners. Although the acquisitions are distributed among several locations throughout Kachemak Bay, all are important wetlands for migratory and nesting waterfowl and other wetland dependant birds and all are adjacent to past habitat protection projects. Additionally, in the words of the Pacific Coast JV coordinator, "we will never have the opportunity to protect more important colonial bird nesting habitat" than we do with this proposal.

We are pleased to bring a diverse partnership to this project that will protect the most important wetlands and habitats for migratory birds within the Kachemak Bay ecosystem and look forward to working with NAWCC to make this important work happen.

**NORTH AMERICAN WETLANDS CONSERVATION ACT PROPOSAL
KACHEMAK BAY WETLANDS CONSERVATION PROJECT, ALASKA**

COUNTY, STATE, CONGRESSIONAL DISTRICT: Kenai Peninsula Borough, Alaska. Congressional District 1.

TITLE HOLDERS AND MANAGERS: The Nature Conservancy (619 acres); Kachemak Heritage Land Trust (288 acres); Alaska Division of Parks and Outdoor Recreation (104 acres); City of Homer (151 acres); USFWS (3 acres).

FUNDING, PROPOSAL COSTS, AND ACRES () = duplicated acres:

GRANT FUNDS (Recipient: The Nature Conservancy)	\$ 856,700
PARTNER FUNDS	\$3,273,150
- The Nature Conservancy	\$ 1,795,150
- Kachemak Heritage Land Trust	\$ 86,900
- Alaska Division of Parks and Outdoor Recreation	\$ 116,000
- City of Homer (non-matching)	\$ 41,000
- Exxon Valdez Oil Spill Council (non-matching)	\$ 1,234,100
 TOTAL FUNDS	 \$ 4,129,850

	GRANT ACRES	PARTNER ACRES	TOTAL ACRES	TOTAL COST	
ACQUISITION			1,165.7	\$ 4,078,450	(\$3,499 /ac)
Fee	726.7	414	1,140.7	\$ 3,875,550	(\$3,397/ac)
Fee Donated		25	25	\$ 202,900	(\$8,116/ac)
Easement				0	
Easement Donated				0	
Lease				0	
Lease Donated				0	
Other Acquisition Costs				\$ 51,400	
RESTORATION				0	
ENHANCEMENT				0	
OTHER				0	
TOTAL ACRES & COST	726.7	439	1,165.7	4,129,850	(\$3,543/ac)

PURPOSE AND WORK PLAN:

Used by millions of shorebirds, thousands of waterfowl, gulls and terns, seabirds, and raptors, Kachemak Bay is one of the most critical sites for migratory birds in the world. This project strengthens the work of numerous partners operating to conserve wetlands and waterfowl within the Kachemak Bay area. It builds on the Kachemak Bay and Fox River Flats Critical Habitat Area Plan, the Kachemak Bay National Estuarine Research Reserve Final Management Plan, the Western Hemisphere Shorebird Network designation, and The Nature Conservancy's Site Conservation Plan. The Kachemak Bay Wetlands Conservation Project is a high priority for continued conservation in this globally significant waterfowl site.

Already, partners have conserved over 200 acres of wetlands and associated uplands in the past two years. This includes acquisition of 18 acres in Beluga Wetlands/Airport Critical Habitat Area, 106 acres of intertidal wetlands by the City of Homer and the Exxon Valdez Oil Spill Council on Homer Spit, Overlook Park, and Beluga Slough, and seven acres by DNR Division of State Parks and Outdoor Recreation in China Poot Bay. TNC will use private funds to acquire nearly 211 acres at China Poot Bay- the largest enclosed tidal estuary in lower Cook Inlet, which supports salt marsh, intertidal wetlands, and gravel bars and uplands that buffer critical estuarine wetlands. TNC will also acquire Gull Island an important habitat for over 13,000 nesting seabirds. With grant funds, partners will protect over 700 acres of additional wetlands and associated uplands on Homer Spit, Beluga Slough and Lake, Lampert Lake, Stone Steps Lake, and Fox River Flats (see maps).

This project is part of The Nature Conservancy's landscape scale conservation effort in this part of Alaska. Identified as one of the most critical watersheds in the Cook Inlet ecoregion, the Conservancy will be investing resources in community-based conservation to insure the conservation of important wetland habitat throughout Kachemak Bay. The protection efforts in this proposal are just part of a broader effort that will attempt to insure the long-term survival of all native species within the Kachemak Bay watershed. This work will involve additional upland acquisition, education and outreach, and the encouragement of a local economy compatible with the important resources of the area.

Primarily, this phase of the project will use critical acquisitions to accomplish our goals in the area. Partners will use grant and partner funds to acquire tracts in fee-simple on Homer Spit, Fox River Flats, China Poot Bay, Beluga Slough and Lake, Lampert Lake, and Stone Steps Lake.

WETLANDS VALUES:

Several important wetland types will be protected through this project. Marine intertidal, palustrine forested, palustrine emergent, and estuarine intertidal emergent (all decreasing) will be a major focus. With partners, we will acquire these wetland types around China Poot Bay, Beluga Slough, and Homer Spit, and will acquire forest, grassland, and gravel bar associated uplands as important feeding and nesting areas buffering these important wetland habitats. Acquisition of 239 acres in the Fox River Flats will protect riverine and estuarine intertidal emergent wetlands (decreasing) which provides habitat for nesting waterfowl, migrating shorebirds, bald eagles, moose and brown bear. Approximately 164 acres of marine intertidal wetlands (decreasing) will also be protected, providing increased habitat for shorebirds and feeding waterfowl. At Lampert Lake and Stone Steps Lake, the two most important Aleutian tern breeding areas in Kachemak Bay, partners will protect approximately 440 acres of lacustrine, palustrine shrub, and palustrine emergent (decreasing) wetlands for over 60 breeding pairs of Aleutian terns. The proposal area contains breeding habitat for red-faced cormorant, black turnstone, Aleutian tern, and 14 other priority wetland dependent species. *In total, this project will protect 846 acres of wetlands (73% of the total acreage to be protected). Of these, 58% are declining types that are buffered by associated uplands and stable or increasing wetlands.* The project will produce hundreds of waterfowl annually including mallard, pintail, greater scaup, Canada geese, and common eider. Wetlands and associated uplands acquired through this project will also help maintain water quality and will provide some flood control by helping store flood waters in the wetlands of Beluga Slough and Fox River Flats and the extensive wetlands associated with Lampert and Stone Steps Lakes.

PUBLIC BENEFITS AND SPECIAL CIRCUMSTANCES:

The public has been informed about the proposal through key community leaders involved in its development. Public lands in the proposal area are open to the public for a variety of uses including bird watching, hiking, hunting, research, etc. Some restrictions may apply on Nature Conservancy and Kachemak Heritage Land Trust lands, especially during certain vulnerable periods and in vulnerable areas such as Gull Island to protect breeding or sensitive species. The area includes Kachemak Bay State Park that is open to the public for hiking and sea kayaking. Lands adjacent to Beluga Slough will house a new visitor center for the Alaska Maritime National Wildlife Refuge. Protecting lands adjacent to this site will provide valuable opportunities to share the importance of wetlands to migratory birds with the visiting public. The China Poot Bay lands will provide a living laboratory for students working at the Center for Alaskan Coastal Studies' Peterson Bay field station, which is adjacent to this match-acquisition property. Finally, the involvement of the National Estuarine Research Reserve (NERR) will provide opportunities for the public to access project acreage through this important partner, and produce additional benefits through the research function of the NERR.

This proposal involves a unique combination of partners, including some that are new to the NAWCA program (Seldovia Native Association, Kachemak Heritage Land Trust, Center for Alaskan Coastal Studies, City of Homer, and Alaska Department of Natural Resources- Division of Parks and Outdoor Recreation). Tracts on Homer Spit are zoned for commercial use and will be developed within 2-3 years. Both Beluga and Lampert Lake properties are subdivided into smaller lots and surrounded by residential and commercial properties. Properties in China Poot Bay, and Fox River Flats are threatened with residential development and logging, and if not acquired could be altered in the next 3 years.

PROPOSAL PART 2. DETAILED INFORMATION

EXTRA INFORMATION FOR PART 1:

BUDGET TABLE:

MATCH- & GRANT-SUPPORTED WORK COST ELEMENTS & ACTIVITIES	GRANT \$	NON-FEDERAL PARTNERS & MATCH \$ (in thousands of \$; e.g. 10 = \$10,000. Amounts have been rounded.)				FEDERAL PARTNERS & NON-MATCH \$	TOTAL \$
		OLD CASH \$	NEW CASH \$	OLD OTHER \$	NEW OTHER \$		
Personnel	10		T 10				20
Travel							-
Appraisals	20	T 11					31
Fee Acquired	827		T 1,774			E 1,275	3,876
Fee Donated		K 87 A 116					203
Easement Acquired							
Easement Donated							
Lease Acquired							
Lease Donated							
Total ACQUISITION	857	214	1,784	0	0	1,275	4,130
GRAND TOTAL \$\$\$	857	214	1,784	0	0	1,275	4,130
Partner Symbols & \$:							
-The Nature Conservancy (T)			1,795				1,795
-Kachemak Heritage Land Trust (K)			87				87
-Alaska Division of State Parks (A)			116				116
-City of Homer (H)						41	41
-Exxon Valdez Oil Spill (E)						1,234	1,234
Grant = NAWCA	857						857
TOTALS	\$ 857		\$ 1,998		\$ 0	\$ 1,275	\$ 4,130

BUDGET NARRATIVE AND MATCH ELIGIBILITY

(*denotes match actions that have not yet occurred and that coincide with “New” column in Budget Table):

ACQUISITION - \$4,129,850 (\$ 856,700 Grant, \$1,998,050 Match Partners, 1,275,100 Non-match Partners)

PERSONNEL \$ 20,000 (\$ 10,000 Grant, \$ 10,000 Partners)

1.*\$10,000 Grant. Cost estimate is based on .2 FTE based on \$50,000/year. Rate is fair market value for this service. Personnel costs will be incurred by both The Nature Conservancy and Kachemak Heritage Land Trust.

2.*\$10,000 The Nature Conservancy. Cost estimate is based on .2 FTE based on \$50,000/year. Rate is fair market value for this service. Partner funds will be from a non-Federal source (private membership funds).

APPRAISALS \$ 31,400 (\$ 20,000 Grant, \$ 11,400 Partners)

- 1.*\$ 20,000 Grant. Cost estimate is based on 10 appraisals at \$2,000 each. Although more than 10 parcels will need to be appraised, many are very similar and there should be significant economy in conducting appraisals. Rate is fair market value for this service.
2. \$ 11,400 The Nature Conservancy. Cost estimate is based on invoice for service provided in 1998. Rate is fair market value for this service. Partner funds were from a non-Federal source (private foundation).

FEE ACQUIRED \$ 4,078,450 (\$ 826,700 Grant, \$ 3,251,750 Partners)

1.*\$ 826,700 Grant. \$ 1,138/acre = 726.7 acres. Cost estimates are based May 1999 tax assessments (which reflect current fair market value reasonably well according to a local real estate appraiser). Tracts are located on maps in the proposal and identified as follows: Homer Spit (Grant); Beluga Slough (Grant); Beluga Lake (Grant); Lampert Lake (Grant); Stone Steps Lake (Grant); and Fox River Flats(Grant). Collectively, these acquisitions significantly increase protection to the most important wetlands on the north side of Kachemak Bay (where the development pressure is most severe) and augment past conservation efforts of many state, federal, and local partners. There are no improvements or development on any of the grant properties with the exception of two cabins on one of the Stone Steps Lake parcels as noted below. The following information is provided for each grant tract:

Tract designation on map in proposal: Beluga Lake (Grant)

Approximate acreage of wetlands and other habitats: Two parcels totaling 31.28 acres with approximately 18 acres of palustrine forested 10 acres of palustrine emergent, and 3 acres of palustrine shrub wetlands.

Key migratory bird habitat values: These tracts are part of a major wetland complex at the head of Beluga Lake, a locally important area for nesting and migrating waterfowl as well as other wetland-dependant species. Concentrations of moose are particularly high on this site. These two tracts are adjacent to two properties owned by the Kachemak Heritage Land Trust, one of which is included in this proposal as a match.

Value: \$35,100 for 31.28 acres (\$1,122/acre) based on 1999 tax assessment of the property.

Tract designation on map in proposal: Beluga Slough (Grant)

Approximate acreage of wetlands and other habitats: 1.2 acres of estuarine intertidal emergent wetlands generally inundated on monthly high tides.

Key migratory bird habitat values: This tract is the last remaining unprotected and developable parcel within an extremely valuable intertidal estuary and is surrounded by USFWS lands. The tract and surrounding estuarine lands support high numbers and variety of migratory waterfowl and shorebirds in the spring and fall and nesting/feeding habitat for waterfowl and shorebirds in the summer.

Value: \$30,200 for 1.2 acres (\$25,812/acre) based on 1999 tax assessment of the property.

Tract designation on map in proposal: Lampert Lake (Grant)

Approximate acreage of wetlands and other habitats: These 32.97 acres in four parcels are almost entirely wetlands including approximately 11 acres of lacustrine habitat, 12 acres of palustrine shrub wetlands, and 8 acres of palustrine emergent wetlands. Additional opportunities to conserve wetlands (beyond the scope of this proposal) exist here.

Key migratory bird habitat values: Lampert Lake and the associated patterned wetlands to the northeast support breeding Aleutian terns as well as migratory and nesting waterfowl. The terns nested on this site in 1999 and sporadically prior to that. The area is also important for overwintering moose.

Value: \$75,400 for 32.97 acres (\$2,287/acre) based on 1999 tax assessment of the property.

Tract designation on map in proposal: Stone Steps Lake (Grant)

Approximate acreage of wetlands and other habitats: The proposed tracts total 410.2 acres dominated by palustrine forested, palustrine emergent, and palustrine shrub wetlands. A 45 acre lake and 20 acres of riparian wetlands are also included in these properties. Additional opportunities to conserve wetlands (beyond the scope of this proposal) exist here.

Key migratory bird habitat values: The Stone Steps Lake wetland is a large complex of lake/patterned bog/riparian forest with extensive values for migratory birds. It supports the largest breeding population of Aleutian terns in the Kachemak Bay area (over 60 pairs) as well as breeding areas for waterfowl, shorebirds, bald eagles, kingfishers, and other species. Migratory waterfowl use the lake and emergent

wetlands extensively in spring and fall. The riparian areas associated with Fritz Creek that runs through the tracts are extremely important for overwintering moose, black and brown bear, and other mammals and support species such as American dippers.

Value: \$403,900 for 410.2 acres (\$985/acre) based on 1999 tax assessment of the property. There are two small unused recreational cabins on Stone Steps Lake as well as a dock and some sheds.

Tract designation on map in proposal: Fox River Flats (Grant)

Approximate acreage of wetlands and other habitats: These two tracts total 239 acres including approximately 30 acres each of palustrine emergent and palustrine forested wetlands, 80 acres of riparian wetlands, and 60 acres of palustrine shrub wetlands. Additional opportunities to conserve wetlands (beyond the scope of this proposal) exist here.

Key migratory bird habitat values: The Fox River Flats contain the most important and extensive nesting habitat for mallards, pintails, and other dabbling ducks in Kachemak Bay and are extremely important for other migratory waterfowl and shorebirds. These two tracts, together with a 160 acre parcel owned by the Kachemak Heritage Land Trust conserve approximately a two mile corridor of private land adjacent to Fox River and buffer the extensive public lands in the Fox River Flats Critical Habitat Area.

Value: \$198,000 for 238.76 acres (\$829/acre) based on 1999 tax assessment of the property.

Tract designation on map in proposal: Homer Spit (Grant)

Approximate acreage of wetlands and other habitats: Two tracts totaling 12.32 acres are entirely marine intertidal wetlands and include approximately 1/3 mile of shoreline.

Key migratory bird habitat values: This area of intertidal shoreline and flats provides important feeding areas for a broad variety of migratory and overwintering shorebirds. Rock sandpipers use the area extensively in the winter. Additionally, the area is important for waterfowl such as common and Steller's eiders that feed on sea grass in the waters immediately adjacent to the property throughout the year. Conservation of these lands will prevent the sprawl of commercial lands at the end of the Homer Spit and provide a contiguous area of public lands that extend for three miles along the Homer Spit.

Value: \$84,100 for 12.32 acres (\$6,826/acre) based on 1999 tax assessment of the property.

2.*\$ 1,773,750 The Nature Conservancy. \$8,406/acre = 211 acres. Partner funds will be from a non-Federal source (private foundation and individual donations). The following information is provided for each match tract:

Tract designation on map in proposal: China Poot (TNC)

Approximate acreage of wetlands and other habitats: 211 acres including 67 acres of marine intertidal and estuarine intertidal emergent wetlands and 144 acres of uplands.

Key migratory bird habitat values: This tract provides ideal winter habitat for sea ducks and nesting habitat for mallards and other waterfowl. Other habitat in this tract is important for migrating shorebirds, nesting murrelets, seabirds, and nesting bald eagles. Common eiders nest on the spits that protect China Poot estuary.

Value: Based on 1998 appraisal of this property.

3. \$ 1,275,100 (\$41,000 City of Homer; \$1,234,100 Exxon Valdez Oil Spill Council). \$6,281/acre = 203 acres. The tracts below were purchased with funds from the City of Homer and the Exxon Valdez Oil Spill (EVOS) Council. The EVOS funds are not eligible as a match for NAWCA funding (federal source), and the City of Homer funds have already been used to match federal funds associated with the Kachemak Bay National Estuarine Research Reserve, but both are part of the broader partnership to protect important wetlands in Kachemak Bay. The parcels were acquired within the 2-year NAWCA match eligibility period and are adjacent to parcels to be acquired with grant funds. The following information is provided for each tract:

Tract designation on map in proposal: Homer Spit (H&E); Beluga Slough (H&E); Overlook Park (E)

Approximate acreage of wetlands and other habitats: 38 acres of estuarine intertidal wetlands in Beluga Slough and 68 acres on Homer Spit including 60 acres of marine intertidal wetlands. The Overlook Park parcel contains the most diverse tidepool communities on the north shore of Kachemak Bay and are used extensively by migratory shorebirds. Uplands included in this property provide a buffer to this sensitive site.

Key migratory bird habitat values: These areas are extremely important for migrating shorebirds, nesting and migrating waterfowl and nesting bald eagles. The Beluga Slough tract may provide important nesting habitat for Aleutian Terns.

Value: Appraisals were the basis for valuation.

FEE DONATED \$ 202,900 Partners

1. \$ 86,900 Kachemak Heritage Land Trust. \$4,828/acre = 18 acres. This parcel was donated to the Kachemak Heritage Land Trust by a private donor (Harry Buxton) in September 1997, within the 2-year NAWCA match eligibility period. The following information is provided for the tract:

Tract designation on map in proposal: Beluga Lake (KHLT)

Approximate acreage of wetlands and other habitats: 18 acres, including 9 acres of uplands and 9 acres of palustrine/shrub and palustrine/emergent wetlands.

Key migratory bird habitat values: This tract buffers major wetlands at the head of Beluga Lake, a locally important area for nesting and migrating waterfowl as well as other wetland-dependant species.

Concentrations of moose are particularly high on this site.

A description of how the donated property increases the resource values of the proposal or increases the degree of protection or management of wetlands: This tract contains palustrine emergent wetlands and associated uplands which are decreasing worldwide, so it adds significant value to the project. The purpose of the donation was to ensure the conservation, open space, wetland, wildlife habitat, and educational values of the property. This tract is adjacent to two tracts to be purchased with grant funds.

Value: The tax assessment was used as the basis of the valuation as no appraisal was performed at the time of donation.

2. \$ 116,000 Alaska Dept. of Natural Resources Division of Parks and Outdoor Recreation. \$16,571/acre = 7 acres. Donation was made to Alaska Division of Parks and occurred in December 1998, within the 2-year NAWCA match eligibility period. The donation from a private individual (Tim Christy) included 7 contiguous one-acre tracts that were recreationally subdivided. The following information is provided for these match tracts:

Tract designation on map in proposal: China Poot (State Parks)

Approximate acreage of wetlands and other habitats: 6 acres of uplands associated with one acre of marine intertidal wetlands.

Key migratory bird habitat values: This tract buffers important migratory bird habitat in China Poot Bay. There is one known Bald Eagle nest on the property, and adjacent wetlands provide winter habitat for sea ducks and nesting habitat for mallards and other waterfowl.

A description of how the donated property increases the resource values of the proposal or increases the degree of protection or management of wetlands: The donated lots contribute to protection of resource values by limiting opportunities for shoreline development and by reducing potential disturbance to marine intertidal wetlands. The tract was donated to Kachemak Bay State Park to conserve the shoreline and associated uplands in China Poot Bay. These lands protect nesting habitats for bald eagles, pigeon guillemots, marbled murrelets, and other species that use the forested fringe around important wetlands.

Value: The tax assessment for 1998 was used as the basis for determining value of these lots. Analysis of comparable sales and appraisals of adjacent parcels supports this high value per acre. These lands are in an area of prime development potential for recreational properties.

MILESTONES AND PREVIOUS AND FUTURE PROPOSALS

MILESTONES	ESTIMATED COMPLETION DATE
• Acquired 18 acres (KHLT)	September 97
• Acquired 7 acre addition to State Park (DNR)	December 98
• Acquired 203 acres on Homer Spit, Beluga Slough and Overlook Park (City and EVOS)	March 98
• Acquire China Poot Tracts (TNC)	Grant Agreement date + 90 days
• Acquire Lampert Lake and Stone Steps Lake tracts (TNC)	Grant Agreement date + 180 days
• Acquire Homer Spit Tract (City)	Grant Agreement date + 360 days
• Acquire Fox River Flats/Beluga Slough Tracts (KHLT)	Grant Agreement date + 450 days
• Kachemak Bay Phase II Grant	Grant Agreement date + 360 days

**TECHNICAL ASSESSMENT QUESTION 1
HOW DOES THE PROPOSAL CONTRIBUTE TO THE CONSERVATION OF
WATERFOWL HABITAT?**

A.

HIGH PRIORITY SPECIES	BREEDING	WINTERING	MIGRATION	IMPACT
Tule Greater White-fronted Goose			U	P
Cackling Canada Goose			U	P
Northern Pintail	C	C	C	P
Mallard	C	C	C	P
Lesser Scaup			U	P
Greater Scaup	C	C	C	P

NARRATIVE:

This project will protect habitat for all of the species listed above. Protection of existing wetlands and associated uplands especially in the Fox River Flats, Stone Steps Lake, and China Poot Bay area will provide breeding habitat for northern pintail, mallards, and greater scaup. In addition to prime breeding habitat, thousands of mallards, and pintails congregate during spring and fall staging on Fox River Flats. All of the species will benefit from increased protection in acquired wetlands during migratory stopovers, and protected winter habitat for mallards, pintails, and greater scaups. Greater White-fronted Geese and Cackling Canada Geese estimated at times near 1,000 individuals both stopover in the wetlands of Fox River Flats and will benefit from this project.

B.

OTHER PRIORITY SPECIES	BREEDING	WINTERING	MIGRATION	IMPACT
Wrangel Island Snow Goose			R	P
Pacific Brant			U	P
Redhead			U	P
Canvasback			U	P
Ring-necked Duck			R	P
Common Eider	C	C	C	P

NARRATIVE: Common eiders breed on project sites and protection of spits and barrier islands near China Poot Bay will benefit this species. Eiders also use the marine areas west of the tracts on Homer Spit extensively to feed. Wrangel Island snow geese, brants, redheads, canvasbacks, and ring-necked ducks all use the Fox River Flats and China Poot Bay area during migration where acquisitions of wetland and adjacent uplands will benefit these species.

C. OTHER WATERFOWL: American wigeon, harlequin duck, black scoter, common goldeneye, bufflehead, green winged teal, common and red-breasted merganser, trumpeter swan, northern shoveler, Gadwall, king eider, Steller's eider, oldsquaw, surf scoter, white-winged scoter, and trumpeter and tundra swan.

NARRATIVE: American wigeon, harlequin duck, black scoter, common goldeneye, bufflehead, green winged teal, common and red-breasted merganser, and trumpeter swan all breed at project sites, and will benefit from lands acquired with project funds. Northern shoveler, gadwall, king eider, Stellers eider, oldsquaw, surf scoter, white-winged scoter, and tundra swan all use project sites and will also benefit from acquisitions funded by this project. The Bay supports over 100,000 wintering waterfowl (90% of Cook Inlet population of over-wintering waterfowl). Scoters resting in China Poot Bay during spring and fall migrations often number 10,000 to 11,000. Trumpeter swans also stage in the Fox River Flats and they have been recorded in densities of 2.6 swans/square mile during spring and fall.

TECHNICAL ASSESSMENT QUESTION 2
HOW DOES THE PROPOSAL CONTRIBUTE TO THE CONSERVATION OF
OTHER WETLAND-DEPENDENT OR WETLAND-ASSOCIATED MIGRATORY BIRDS?

A. BREEDING AND WINTERING PRIORITY SPECIES

96-SOUTHERN ALASKA COAST	TIER 1 High Priority Species	TIER 2 Priority Species	IMPACT
Red-faced Cormorant	B,W		MA
Black Turnstone	B		MI
Rock Sandpiper	W		MA
Aleutian Tern	B		MA
Common Loon		B	MA
Bald Eagle		B,W	MA
Greater Yellowlegs		B	MA
Wandering Tattler		B	MA
Short-billed Dowitcher		B	MI
Glaucous-winged Gull		B	MA
Pigeon Guillemot		B,W	MA
Kittlitz's Murrelet		B	MI
Ancient Murrelet		B,W	MI
Cassin's Auklet		W	MA
Short-eared Owl		B	MI
Rufous Hummingbird		B	MI
American Dipper		B,W	MA
Swainson's Thrush		B	MA

NARRATIVE: Between 50 and 60 Red-faced Cormorants breed on Gull Island which will be acquired with match funds. Black turnstone, and Aleutian tern both breed at project sites. Approximately 60 pairs of Aleutian terns were observed nesting in the Stone Steps Lake wetlands in 1999 and documented nesting occurs at Lampert Lake sporadically. These species are particularly sensitive during breeding, and acquisition of lands in Beluga, Lampert, and Stone Steps Lakes as well as Beluga Slough, Homer Spit, and China Poot Bay will reduce disturbance to these species during breeding. Nearly 7,000 black turnstone have been reported from Homer Spit in one season. Rock sandpipers, numbering about 1,000, over-winter on Homer Spit, and will also benefit from acquisitions there. Common loons and bald eagles are present throughout the watershed; 10 bald eagle nests have been identified on the China Poot Bay property, which will be acquired with match funds. Greater Yellowlegs, wandering tattlers and short-billed dowitchers are present on the Homer Spit and barrier beaches of China Poot Bay. Upwards of 7,700 dowitchers were counted in 1992 on Homer Spit. Glaucous winged gulls (700 individuals), and pigeon guillemots (40 individuals) breed on Gull Island. Kittlitz' murrelets, ancient murrelets, and Cassin's auklet feed in China Poot Bay buffered by Island Peninsula, which also provides nesting habitat for pigeon guillemots and Cassin's auklet. Short-eared owls, rufous hummingbirds, and swainson's thrush will all benefit from associated upland protected from development on lands around China Poot Bay and intertidal estuarine wetlands, associated uplands on Fox River Flats, and wetlands around Stone Steps Lakes and Beluga Lake. American dippers use the riparian areas on the Fox River Flats and in Fritz Creek that flows through the Stone Steps Lake wetlands.

B. IN-TRANSIT MIGRANTS OF CONCERN

SPECIES	USE	IMPACT
American Golden Plover	C	MA
Whimbrel	C	MA
Hudsonian Godwit	R	MI
Marbled Godwit	X	MI
Red Knot	U	MI
Semipalmated Sandpiper	C	MA
Short-billed Dowitcher	U	MI
Long-billed Dowitcher	C	MA

NARRATIVE:

Millions of migrating shorebirds use Kachemak Bay each spring. American golden plovers and whimbrels will benefit from land acquisition and restoration on Homer Spit, Fox River Flats and China Poot Bay estuary where the majority of these species stopover for several weeks. In 1992, 82 whimbrel individuals were recorded on Homer Spit, and an equal number is likely on the China Poot Bay spits. Increased protection of this habitat will help keep this species from declining. Hudsonian and marbled godwits, red knots, and short billed dowitchers have been recorded from Homer Spit, China Poot Bay, and Fox River Flats where their small numbers will benefit from acquisitions. Semipalmated sandpipers, and long-billed dowitchers occur in China Poot Bay, on Homer Spit, and in the Fox River Flats; biologists estimate their numbers in the thousands. Long-billed dowitchers also use the emergent wetlands that fringe Lampert and Stone Steps Lakes. No accurate counts have taken place, but acquisition of wetlands in Fox River Flats and the mud flats and barrier spits at China Poot Bay, as well as acquisition on Homer Spit will keep lands from being disturbed thus benefiting these species.

C. OTHER WETLAND-DEPENDENT SPECIES

Black bellied plover, dunlin, baird's sandpiper, great blue heron, sandhill crane, osprey, northern harrier, northern goshawk, yellow billed loon, red-throated loon, golden eagle.

NARRATIVE: All the above species use wetlands that will be acquired or restored with match and grant funds. Great blue herons are only occasional visitors, but Kachemak Bay marks one of the northern/western extensions of its range and thus makes it important for this species. Sandhill cranes, northern harriers, northern goshawks, red throated loons, and golden eagles breed in the project area and use project wetlands extensively. Acquisitions will benefit these species by protecting nesting and feeding areas from development. Numbers will likely remain stable or increase due to protection efforts outlined in this proposal. Yellow-billed loons are winter residents and will benefit from wetland protection. Ospreys migrate through the area and feed in wetlands associated with Fox River Flats and China Poot Bay. Acquisitions in this area will benefit osprey, protecting their feeding habitat from development or alteration.

TECHNICAL ASSESSMENT QUESTION 3

HOW DOES THE PROPOSAL BENEFIT THE NORTH AMERICAN WATERFOWL MANAGEMENT PLAN AND CONTRIBUTE TO SITES THAT HAVE BEEN RECOGNIZED FOR WETLAND VALUES?

A. The Pacific Coast Joint Venture has proposed that Alaska be added to this Joint Venture, and Alaska is a part of the developing Sea Duck Joint Venture. The Kachemak Bay Project is part of the Cook Inlet Waterfowl Habitat Area of Concern. Kachemak Bay is *continentally important* as a resting area for ducks and geese on their migratory routes to nesting areas in northern Alaska. Fox River Flats and China Poot Bay provide ideal staging, resting and nesting habitat for dabbling ducks such as mallard, pintail and green winged teal. Over 100,000

waterfowl also use the upper end of Kachemak Bay for over wintering habitat, and over 5,000 mallards over winter in China Poot Bay. Kachemak Bay is the most important marine bird/sea duck habitat in Cook Inlet with over 90% of the wintering marine birds in Cook Inlet. This area is also important for feeding, nesting rearing, and migratory staging throughout the year. The inner coastline of the Bay has an estimated total year-round density of 679 birds/mile². It is also *globally important* as a site for migrating shorebirds with several million shorebirds frequenting the area each spring. Acquisition of critical wetlands and associated uplands in Fox River Flats, China Poot Bay, Beluga Slough, Lampert Lake, Stone Steps Lake, and Homer Spit will protect habitat from development and disturbance.

B. Kachemak Bay is designated a Western Hemisphere Shorebird Reserve Network site, a State Critical Habitat Area, is part of a National Estuarine Research Reserve, includes units of Alaska Maritime National Wildlife Refuge, and was identified by the World Bank as one of two bodies of water in the U.S. meriting special attention for its extraordinary productivity. Work accomplished under this proposal will enhance the site in ways that are compatible with the intent of the above designations. The protection and restoration of wetlands and associated uplands will add lands to the refuge system and the critical habitat area, will enhance shorebird habitat, and will provide access to sites for staff associated with the National Estuarine Research Reserve.

**TECHNICAL ASSESSMENT QUESTION 4
HOW DOES THE PROPOSAL RELATE TO THE
NATIONAL STATUS AND TRENDS OF WETLANDS TYPES?**

Sum of A + B acres below = 1,165
Sum of acres NOT IN PARENTHESES in Part 1 = 1,165

A. Wetlands 846 ACRES 73 %

Decreasing Types

130 Acres PALUSTRINE EMERGENT
108 Acres PALUSTRINE FORESTED
74 Acres ESTUARINE INTERTIDAL EMERGENT
176 Acres MARINE INTERTIDAL

Stable Types

198 Acres PALUSTRINE SHRUB
100 Acres RIVERINE (all types)
 Acres ESTUARINE INTERTIDAL FORESTED/SHRUB

Increasing Types

59 Acres LACUSTRINE (all types)
 Acres PALUSTRINE NON-VEGETATED
 Acres ESTUARINE INTERTIDAL
 Acres ESTUARINE SUBTIDAL (all types)

NARRATIVE: 58% of the wetlands included in this proposal are decreasing types that are buffered by associated stable and increasing wetlands and upland habitats. The majority of the wetlands are estuarine intertidal emergent and marine intertidal in the areas of China Poot Bay, Fox River Flats, and Homer Spit. Beluga Slough and portions of the China Poot Bay area contain palustrine emergent wetlands and several acres of palustrine shrub wetlands. Beluga Lake, Lampert Lake, and Stone Steps Lake tracts each contain abundant palustrine forested, emergent, and shrub wetlands. There are about 100 acres of riverine wetlands on the Fox River Flats tracts and in the Stone Steps Lake wetland complex.

B. Uplands 319 ACRES 27 %

NARRATIVE:

Uplands included in the proposal are: a) forested and adjacent to important decreasing wetlands or b) uplands at and above high tide including cliffs, beach strand communities, and forested coastal fringe. The lands just above high tide include a 2-acre cluster of islands where approximately 13,000 marine birds nest including several priority species. The forested areas as well as the lands at or above high tide provide an important buffer to decreasing wetlands included in this proposal. If unprotected, uses such as logging and residential development would significantly degrade the habitat value of adjacent wetlands. The forested areas also serve as important habitat for wetland-dependant and migratory birds including bald eagles and marbled murrelets. The coastal fringe to be acquired with this project also provides important nesting habitat for pigeon guillemots. All of the uplands to be acquired are within tracts that contain important wetlands.

**TECHNICAL ASSESSMENT QUESTION 5
HOW DOES THE PROPOSAL CONTRIBUTE TO
LONG-TERM CONSERVATION OF WETLANDS AND ASSOCIATED HABITATS?**

Sum of A + B + C + D acres below = 1,165

Sum of acres NOT IN PARENTHESES + acres IN PARENTHESES in Part 1 = 1,165

A. Benefits in perpetuity 1,165 ACRES 100 %

Acres of EASEMENTS

1,189 Acres of FEE-TITLE that do not need restoration

Acres of FEE-TITLE that need restoration and RESTORATION IS INCLUDED in proposal

Acres of LEASES

Acres permanently RESTORED

Acres permanently ENHANCED

Other Acres

NARRATIVE:

D. Wetlands Significance.

The Kachemak Bay area is one of Alaska’s most important areas for wetland conservation. The City of Homer and the lower Kenai Peninsula are experiencing rapid development (nearly 4% /year) similar to that in the Lower 48, but with fewer regulatory controls. Wetland conversion is a serious problem in this area both from commercial and residential development and recreational use and regulatory agencies have yet to substantially reduce the rate of wetland loss in this part of Alaska. Though the Kenai Peninsula Borough Coastal Plan and the City of Homer Comprehensive Plan indicate the need to limit growth in coastal, estuarine, and riverine wetlands, this growth continues. Growth is most evident in buffering uplands, but actual conversion of wetlands to development sites is taking place throughout the watershed, especially on Homer Spit. Protection of critical tracts identified in this proposal will help avert the damaging impacts of wetland conversion. Prevention now is much less expensive than restoration several years from now. Although restoration of tidal inundation to Mariner Park may be a part of Phase II, we will focus on acquisition in this proposal.

**TECHNICAL ASSESSMENT QUESTION 6
HOW DOES THE PROPOSAL CONTRIBUTE TO THE CONSERVATION OF HABITAT FOR
FEDERALLY-LISTED, PROPOSED, AND CANDIDATE ENDANGERED SPECIES;
STATE- LISTED SPECIES; AND OTHER WETLAND-DEPENDENT FISH AND WILDLIFE?**

A. How Federally threatened, endangered, proposed or Category I candidate species will benefit.

There are seven federally listed or proposed listed species that will benefit from this project. Beluga whales (Cook Inlet population is proposed for listing as endangered), Steller Sea Lion (Endangered), Humpback whale (Endangered), American peregrine falcon (Endangered), Olive-sided flycatcher, Steller’s eider (proposed), and spectacled eiders (Threatened) all use the project area and will benefit from the protection of buffer lands to China Poot Bay and wetlands of the Fox River Flats. Beluga whales feed in the shallows of Fox River flats and adjacent to Homer Spit on salmon. These salmon are dependent on the wetlands adjacent to Fox River and Homer Spit for spawning and rearing. Actions taken to acquire critical habitat in the upper bay, and Homer Spit will enhance

this species. Steller sea lions periodically haul-out on Gull Island and eiders feed adjacent to this site, so habitat here is critical for improving the population status of these listed species. Protecting habitat is identified in the recovery plan for both Steller sea lions and spectacled eiders. American peregrine falcon numbers will increase as this species will benefit from the protection of wetland and mudflat feeding areas and improved prey populations.

B. How State-Listed endangered or threatened species will benefit.

Four State listed species will directly benefit from this project. Gray cheeked thrush (State Special Concern), Townsend's warbler (State Special Concern), blackpoll warbler (State Special Concern), and harbor seal (State Special Concern) all frequent the area. The gray-cheeked thrush and the two warblers will benefit from improved and protected habitat on Island Peninsula and their numbers are likely to increase from this project. Harbor seals use China Poot Bay, and often haul-out on the gravel bars, mud flats and rocky Islets that will be acquired with this project. Thus, their populations will be less threatened after this project is completed. The population of brown bears on the Kenai Peninsula has been identified by the state of Alaska as a "species of special concern" due to a small, isolated population in an area of increasing human use. The tracts on the north side of Kachemak Bay (especially Stone Steps Lake) and in the Fox River Flats will benefit this population.

C. How other wetland-dependent fish and wildlife will benefit.

At least 21 species of terrestrial mammals, and four species of Pacific salmon inhabit wetlands protected by this project. Brown and black bear, moose, river otter, grey wolf, lynx, marten, mink, beaver, weasel, and snowshoe hare all use the wetlands to be acquired with project funds. These species will benefit from increased protection from development or disturbance. Chinook, chum, coho, and sockeye salmon will all benefit from protection of lands identified in this proposal. Salmon rearing areas are particularly important, and will be protected through acquisitions identified herein. Species injured by the Exxon Valdez oil spill such as salmon, blue mussels, marbled murrelets, murrelets, harlequin ducks, sea otters, killer whales, harbor seals and sea lions will also benefit indirectly from this project as lands acquired will buffer important habitat for these species. Marbled murrelets, river otters, bald eagles, harbor seals, and sea otters in particular use the gravel spits to be acquired at China Poot Bay.

**TECHNICAL ASSESSMENT QUESTION 7
HOW DOES THE PROPOSAL SATISFY THE PARTNERSHIP PURPOSE OF THE NORTH
AMERICAN WETLANDS CONSERVATION ACT?**

A. Ratio category of the non-Federal match to the grant request.

Match = \$1,998,050 Grant = \$856,700 Ratio of match:grant = 2.3:1
Ratio Category = **≥ 2:1 match:grant request**

B. Number of non-Federal partners who contribute at least 10% of the grant request.

Number of Non-Federal 10% Partners = **3**
Non-Federal 10% partners are: 3: The Nature Conservancy, Kachemak Heritage Land Trust, Alaska Department of Natural Resources Division of Parks and Outdoor Recreation

C. Number of categories represented by funds documented with partner letters (8 partner categories are shown below:

- 4 Documented Federal agency partners: Exxon Valdez Oil Spill Trustees Council.
- 4 Documented State agency partners: Alaska Department of Natural Resources Division of Parks and Outdoor Recreation
- 4 Documented Non-governmental conservation organizations (e.g., local wildlife club, Ducks Unlimited, Inc., The Nature Conservancy) partners: The Nature Conservancy, Kachemak Heritage Land Trust
- 4 Documented Local governments, counties or municipalities (e.g., Conservation District) partners: City of Homer

Number of Partner Categories = >3

D. Important partnership aspects (e.g., new grant recipient, significant new partners, large number of partners under any category in C. above, non-financial contributions).

This proposal is a culmination of several on-going community based efforts that include a large number and variety of partners. It represents a groundswell of informed community support for ongoing wetland conservation work in this critical, stunning, and highly threatened wetland complex. The partners listed above (including several new partners) have or will provide matching funds or have received donated lands that meet the match eligibility requirements. Nine significant additional partners are vital to the success of wetland conservation efforts in Kachemak Bay. These partners are contributing time and expertise and include:

- Seldovia Native Association (Alaska Native Corporation)
- Center for Alaskan Coastal Studies (non-profit research & education institute)
- Trust for Public Land (non-profit land conservation organization)
- Kachemak Bay Wilderness Lodge (local business)
- Richard and Rhoda Goldman Fund (philanthropic foundation, major funding source)
- U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge
- 3 private landowners (lands donated)

MAPS: Required maps are attached.

PARTNER LETTERS OF FUNDING COMMITMENT:

Included for the following funding partners: The Nature Conservancy, Kachemak Heritage Land Trust, Alaska Department of Natural Resources Division of Parks and Outdoor Recreation, City of Homer, and Exxon Valdez Oil Spill Trustee Council. Additionally, general letters of support are included for: Seldovia Native Association, U.S. Fish and Wildlife Service, and the Center for Alaskan Coastal Studies.

Original partner letters were submitted with our 3/26/99 NAWCA proposal and are on file with the NAWCA Coordinator. Copies are provided in this application package. Only the Kachemak Heritage Land Trust and City of Homer letters have been updated. Originals of these letters are included herein or are being sent directly to the NAWCA Coordinators office.

STANDARD FORM 424 “APPLICATION FOR FEDERAL ASSISTANCE” AND ASSURANCES “B - NON-CONSTRUCTION PROGRAM” AND “D - CONSTRUCTION PROGRAM”: Completed and signed Standard Form 424 and appropriate B and/or D Assurance Forms are attached.