

S B

475





**SENATOR FRED F. ZHAROFF**  
**ALASKA STATE LEGISLATURE**

P.O. BOX 405, KODIAK, ALASKA 99815 (907) 486-5259

DURING SESSION:

P.O. BOX V, JUNEAU, ALASKA 99811 • (907) 465-3473 • 465-3474

**DISTRICT N**

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLAPK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

**MEMORANDUM**

**TO:** Larry Ostrosky  
Special Assistant  
Department of Natural Resources

**FROM:** Karl Ohls  
Office of Senator Zharoff

**DATE:** April 12, 1988

**RE:** SB 475

I sent DNR's proposed language for amendments to SB 475 (Tugidak Island Critical Habitat Area) to Mr. Bruce Baker, deputy director of the Division of Habitat. Mr. Baker called me this morning and told me the division had no problems with the language regarding oil and gas exploration in the Tugidak Island Critical Habitat Area (copied from CSSB 426). As for the language regarding boundary alterations for the Tugidak Island Critical Habitat Area, Mr. Baker suggested the following alternative:

The Department of Fish and Game after completion of a management plan for the critical habitat area may recommend boundary adjustments to the legislature.

I note this language responds to Commissioner Brady's request to the chairman of the Senate Resources Committee. In her April 11 position paper, Commissioner Brady said that if the legislature passes critical habitat legislation the department recommends "language which would allow for boundary amendment as a result of (the) planning process...."

In suggesting the above language, the Division of Habitat wanted to address several concerns.

First, that the Department of Fish and Game, in terms of administrative responsibility is the proper agency to handle planning for critical habitat areas.

Second, that the critical habitat area management plan is a better vehicle to address boundary changes. If Tugidak Island's critical habitat area designation were postponed until after the area plan was completed, then the area plan would be the best means to address boundaries. However, the intent of SB 475 clearly is to recognize the extraordinary natural values of Tugidak Island and, at this time, to give them critical habitat status. In this case,

it may be better to use the critical habitat area plan -- which evaluates the island in much greater detail -- as the basis for boundary adjustments.

Third, that bad precedent is set when you allow state agencies, even with proper notice to the legislature, to change legislatively-designated boundaries. It may be more appropriate to allow the legislature to change the boundaries since the legislature created them.

At any rate, these are the concerns expressed to me by Habitat that we need to work out. Senator Zharoff just returned to Juneau today, and I have not yet had an opportunity to brief him on the status of SB 475. He may have some specific ideas. With this memo, I just wanted to inform you of Habitat's comments on DNR's language and request your response. Please feel free to call me at any time, 465-4922.

cc: Elizabeth Ziegler

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

400 WILLOUGHBY AVE.  
JUNEAU, ALASKA 99801-1796  
PHONE: (907) 465-2400

April 11, 1988

Senator Jack Coghill  
Chairman Senate Resources Committee  
Alaska State Senate  
P.O. Box V  
Juneau, Alaska

99811

Re: SB 475 Tugidak Island Critical Habitat Area

Dear Senator Coghill;

Position: The Department of Natural Resources is not opposed to the protection of critical habitat on Tugidak Island, and recognizes that critical habitat values exist there. However, the Department believes that legislative designation should follow from the planning process. Work on the Kodiak Island area plan is scheduled to begin this summer.

Background: The Kodiak Island Area plan will include Tugidak Island. Legislative designation at this time would preclude management prerogatives and boundary descriptions arrived at through the planning process. Planning team members will include representatives from the Department of Fish and Game. Additionally, other concerns such as archaeological and oil and gas and other resource values will be addressed at that time.

If the legislature should decide to pass critical habitat legislation at this time, the Department would recommend language which would allow for boundary amendment as a result of planning process, as well as language which will allow for oil and gas exploration activities.

I appreciate the opportunity to comment on this legislation and am happy to make my staff available to work with the committee as it moves through the legislature.

Sincerely,

*Jennie Jones*

Judith M. Brady

*for* Commissioner of Natural Resources

cc

Committee Members

Sponsor

Governor's office

FISCAL NOTE

REQUEST:

Revision Date: 2/16/88  
Title: An Act establishing the Tugidak Island critical habitat area.  
Sponsor: Zharoff  
Requestor: Seante Resources

Agency Affected: DNR  
BRU: Land & Water Management  
Components: \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING						

CAPITAL	0	0	0	0	0	0
---------	---	---	---	---	---	---

REVENUE	0	0	0	0	0	0
---------	---	---	---	---	---	---

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

The Department of Natural Resources anticipates no fiscal impact with respect to this legislation.

Prepared by: Lawrence Z. Ostrovsky Phone: 465-2400  
Division: Commissioner Office Date: 4/11/88

Approved by Commissioner Judith M. Brady Date: 4/11/88  
Agency: Department of Natrual Resources

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)



SENATOR FRED F. ZHAROFF  
ALASKA STATE LEGISLATURE

P.O. BOX 405, KODIAK, ALASKA 99815 (907) 486-5259

DURING SESSION:

P.O. BOX V, JUNEAU, ALASKA 99811 • (907) 485-3473 • 485-3474

DISTRICT N

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

TO: Richard Bradley  
Division of Legal Services

FROM: Senator Fred F. Zharoff *by Karl Ohls*

DATE: April 12, 1988

RE: SB 475

On behalf of Senator Coghill and the Senate Resources Committee, I wish to request the preparation of a committee substitute for SB 475, "An Act establishing the Tugidak Island Critical Habitat Area; and providing for an effective date." The committee substitute should contain the changes outlined below.

On page 1, lines 19-20, change the description to read as follows:

- (2) Township 42 South, Range 33 West, Seward Meridian
  - Sections 1 - 11
  - Sections 14 - 23
  - Sections 25 - 36
- (3) Township 42 South, Ranges 34-35 West, Seward Meridian
- (4) Township 43 South, Ranges 34-35 West, Seward Meridian

The purpose of this amendment is to exclude the corner of Sitkinak Island that is included in the present description.

In addition, I wish to make clear that within this description, the boundary for the Tugidak Island Critical Habitat Area only extends to the high water mark. It should not go out any farther into the marine environment. The exception to this is the lagoon at the north end of the island. The lagoon should be included within the boundaries of the critical habitat area.

At an appropriate place in the bill, please insert the following language:

"The Department of Natural Resources, after completion of an area plan, may recommend boundary adjustments to the legislature."

At an appropriate place in the bill, please insert the following language:

"The department shall permit entry within the Tugidak Island Critical Habitat Area for the exploration and development of oil and gas resources when compatible with the purposes for which the critical habitat area was established. An oil and gas lease of state land within the critical habitat area is valid and continues in full force according to its terms."

Please give this request your priority attention. The CS is needed for the Wednesday, April 13 Resources Committee meeting, by 1:30 p.m.

*cc: Elizabeth Ziegler*



STATE OF ALASKA  
OFFICE OF THE GOVERNOR  
**BILL ANALYSIS**

DEPARTMENT Fish and Game	DIVISION Habitat	BILL NUMBER SB475	SPONSOR Zharoff
SHORT TITLE OF BILL Tugidak Island Critical Habitat Area			
DEPARTMENT POSITION Support			
PREPARED BY Bruce Baker, Hab. Actg. Dir.	DATE 2/26/88	COMMISSIONER'S SIGNATURE <i>[Signature]</i>	DATE

**SUMMARY**

OTHER AGENCIES AFFECTED BY BILL Department of Natural Resources	CONSTITUENT GROUPS AFFECTED BY BILL Hunting and fishing groups, recreationalists Kodiak area residents
ORGANIZATIONAL SUPPORT FOR BILL Commercial fishing interests Environmental organizations	ORGANIZATIONAL OPPOSITION TO BILL None known

FISCAL IMPACT:  NONE  FISCAL NOTE ATTACHED

**BACKGROUND/LEGISLATIVE INTENT**

The purpose of establishing Tugidak Island Critical Habitat Area is to provide:

1. Protection and enhancement for fish and wildlife habitat and populations.
2. Continued opportunity for hunting and fishing.
3. Public use and enjoyment of the area in a high quality environment.

**ANALYSIS OF BILL/PROGRAM EFFECTS**

1. Establishes Tugidak Island Critical Habitat Area.
2. Identifies the purpose for which the area is established.
3. Provides for the management of Tugidak Island Critical Habitat Area including development of a management plan.
4. Allows existing cabins to remain.
5. Allows present subsistence, recreational and commercial activities to continue in a manner compatible with the establishment of the critical habitat area.

**AMENDMENTS PROPOSED**

The purpose statement should appear in statute, therefore, it should have a statute number, probably AS 16.20.610(b).

AS 16.20.610(a) should be amended to exclude Sections 12, 13, and 24 of Township 42 South, Range 33 West, Seward Meridian. Portions of these sections include the southern tip of Sitkinak Island.

PLEASE ATTACH A SEPARATE SHEET FOR ADDITIONAL COMMENTS OR ANALYSIS.

FISCAL NOTE

REQUEST:

Revision Date: \_\_\_\_\_  
Title: Tugidak Island Critical  
Habitat Area  
Sponsor: Zharoff  
Requestor: \_\_\_\_\_

Agency Affected: Dept. of Fish and Game  
BRU: Habitat

Components: \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES			62.8			
TRAVEL			2.0			
CONTRACTUAL			7.7			
SUPPLIES			2.0			
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING			74.5			

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND			74.5			
FEDERAL FUNDS						
OTHER						
TOTAL			74.5			

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

Preparation of the Tugidak Island Critical Habitat Area Management Plan.

Prepared by: Bruce H. Baker, Acting Director Phone: 465-4105  
Division: Habitat Date: 2/26/88

Approved by Commissioner: [Signature] Date: 3/23/88  
Agency: Department of Fish and Game

Distribution (by preparer): \*Amount required only if two plans are prepared con-  
Legislative Finance currently. If the existing schedule of one plan per year  
Legislative Sponsor is adhered to, the operating budget would be adequate  
Requestor and this fiscal note would not be necessary.  
Office of Management and Budget  
Impacted Agency(ies)

## Tugidak Island Critical Habitat Area

-Preparation of the Tugidak Island Critical Habitat Area Management Plan will take one year to complete and require the following expenses (in thousands):

### Personnel

Habitat Biologist	(18c)	10 months	4.5/month	45.0
Game Biologist	(16c)	3 months	4.0/month	12.0
Drafting Tech.	(14d)	1 month	3.5/month	3.5
Clerk/Typist	( 8a)	1 month	2.3/month	2.3
				<u>\$62.8</u>

### Travel

staff travel to Kodiak				2.0
------------------------	--	--	--	-----

### Contractual

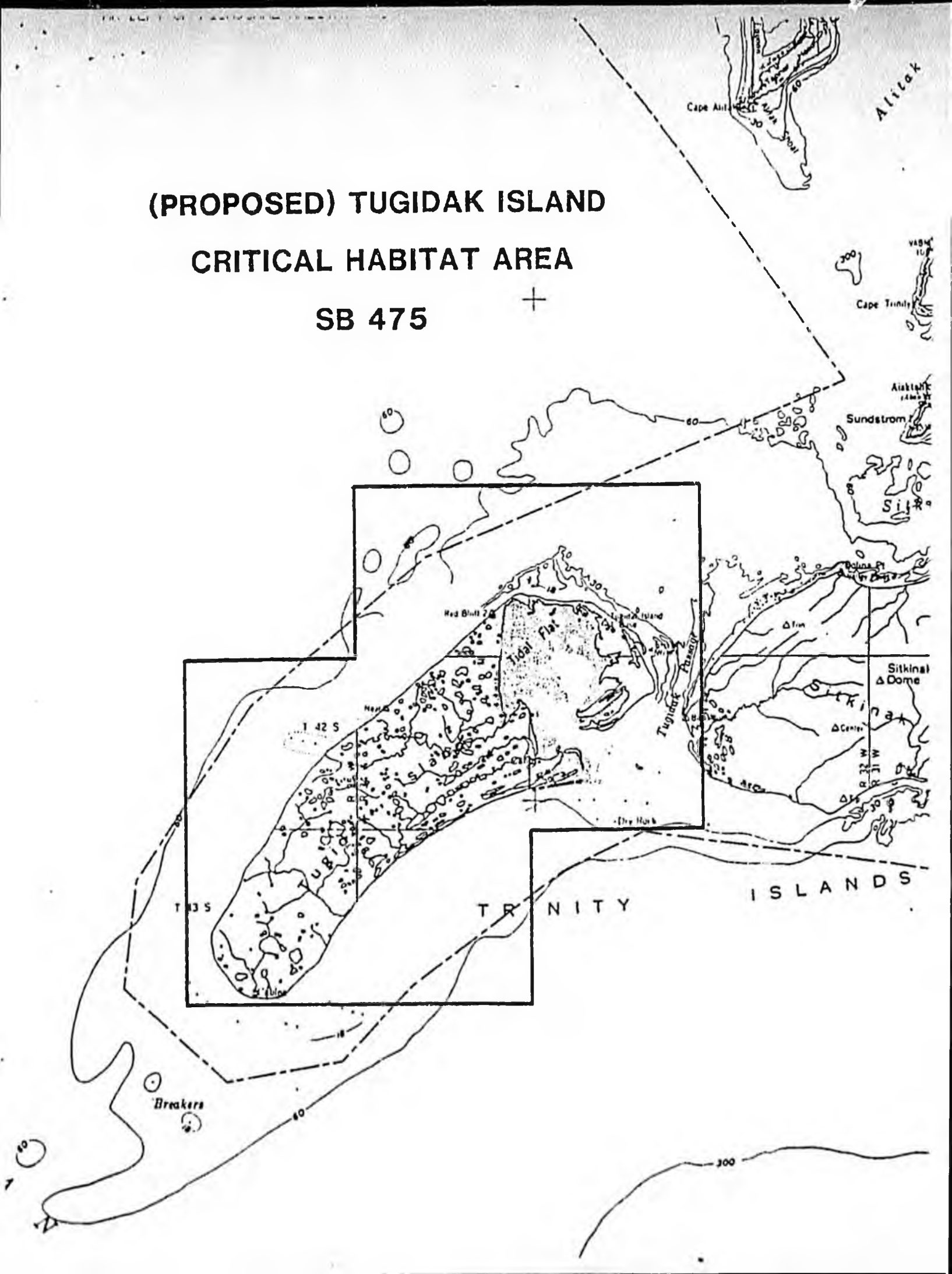
telephone		75/month x 12 months		0.9
photocopy		10/month x 12 months		0.1
advertising /public notices				1.0
aerial photography				0.7
printing/ photographic/ blueprinting				5.0
				<u>\$ 7.7</u>

### Supplies

office supplies				2.0
-----------------	--	--	--	-----

TOTAL				\$74.5
-------	--	--	--	--------

**(PROPOSED) TUGIDAK ISLAND  
CRITICAL HABITAT AREA  
SB 475**



5-1996B

Bradley  
4/13/88

Original sponsor: Zharoff

*TuDeedick*

1 IN THE SENATE

BY THE RESOURCES COMMITTEE

2 C. FOR SENATE BILL NO. 475 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act establishing the Tugidak Island Critical  
7 Habitat Area; and providing for an effective date."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. PURPOSE. The Tugidak Island Critical Habitat Area is  
10 established to ensure the protection and enhancement of fish and wildlife  
11 habitat and populations, especially marine mammals, birds, fish and shell-  
12 fish; the continuation of fish and wildlife harvest; and public use and  
13 enjoyment of the area in a high quality environment.

14 \* Sec. 2. AS 16.20 is amended by adding a new section to read:

15 Sec. 16.20.610. TUGIDAK ISLAND CRITICAL HABITAT AREA. (a) The  
16 state land above the mean high tide line within the following de-  
17 scribed area is established as the Tugidak Island Critical Habitat  
18 Area:

- 19 (1) Township 41 South, Ranges 33 - 34 West, Seward Meridian
- 
- 20 (2) Township 42 South, Range 33 West, Seward Meridian
- 
- 21 Sections 1 - 11
- 
- 22 Sections 14 - 23
- 
- 23 Sections 25 - 36
- 
- 24 (3) Township 42 South, Ranges 34 - 35 West, Seward Meridian
- 
- 25 (4) Township 43 South, Ranges 34 - 35 West, Seward Meridian

26 (b) In addition to the area described in (a) of this section,  
27 the water and the land below the mean high tide line in the lagoon at  
28 the northeast end of Tugidak Island are included within the Tugidak  
29 Island Critical Habitat Area.

1 (c) The Tugidak Island Critical Habitat Area described in (a)  
2 and (b) of this section shall be managed under a management plan  
3 prepared by the department.

4 (d) The department shall permit existing cabins to remain,  
5 ~~present~~ subsistence and recreational uses to continue, and ~~present~~  
6 commercial uses such as seal hunting and placer mining to continue, if  
7 appropriate under the management plan adopted under (c) of this sec-  
8 tion to the extent that the activities are compatible with the estab-  
9 lishment of the Tugidak Island Critical Habitat Area.

10 (e) The department shall permit entry within the Tugidak Island  
11 Critical Habitat Area for the exploration and development of oil and  
12 gas resources when compatible with the purposes for which the critical  
13 habitat area was established. An oil and gas lease of state land  
14 within the Tugidak Island Critical Habitat Area is valid and continues  
15 in full force according to its terms.

16 \* Sec. 3. After completion of an area plan for the area including the  
17 Tugidak Island Critical Habitat Area as enacted in sec. 2 of this Act, the  
18 commissioner of natural resources may recommend an adjustment in the bound-  
19 aries of the critical habitat area to the legislature.

20 \* Sec. 4. This Act takes effect immediately under AS 01.10.070(c).  
21  
22  
23  
24  
25  
26  
27  
28  
29



**SENATOR FRED F. ZHAROFF**  
**ALASKA STATE LEGISLATURE**

P.O. BOX 405, KODIAK, ALASKA 99615 (907) 486-5259

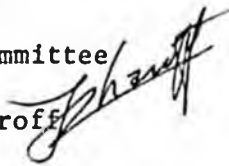
DURING SESSION:

P.O. BOX V, JUNEAU, ALASKA 99811 • (907) 465-3473 • 465-3474

**DISTRICT N**

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

TO: Senator Jack Coghill  
Chairman  
Senate Resources Committee

FROM: Senator Fred F. Zharoff 

DATE: March 2, 1988

RE: Senate Bill 475 - "An Act establishing the Tugidak Island Critical Habitat Area; and providing for an effective date."

I respectfully request that SB 475 be scheduled for a hearing before the Senate Resources Committee at your earliest convenience.

SB 475 creates the Tugidak Island Critical Island Critical Habitat Area. Tugidak Island is an 84,480 acre island approximately 16 miles southwest of Kodiak Island. It is state-owned land within the Kodiak Island Borough. The island features exceptional wildlife and habitat values. Under critical habitat area status, these values would be protected.

I have attached the following backup information for SB 475:

1. Description of the proposed Tugidak Island Critical Habitat Area and map, prepared by the Division of Habitat in the Department of Fish and Game.
2. Map showing location of state mining claims on Tugidak Island, prepared by the Division of Mining in the Department of Natural Resources.

DRAFT 2/88

PROPOSED TUGIDAK ISLAND CRITICAL HABITAT AREA  
BACKGROUND INFORMATION

LOCATION: The proposed Tugidak Island Critical Habitat Area is located approximately 15 miles south of Kodiak Island and is part of the Trinity Islands group.

AREA DESCRIPTION: The proposed Tugidak Island Critical Habitat Area is a large treeless, low lying island. Among its unique features is a large shallow lagoon and barrier spit complex at its northern end.

LAND STATUS: The proposed critical habitat area encompasses approximately 84,480 acres and is entirely state-owned land and water. It is located within the Kodiak Island Borough.

JUSTIFICATION: Tugidak Island is unique in the Gulf of Alaska not only because of its unusual number of extremely productive and diverse fish and wildlife habitats but also because those habitats have remained in a relatively natural, undisturbed state. To date very little human disturbance has occurred on the island to threaten the vulnerable groundnesting birds, harbor seal pupping areas and rich lagoon environment.

Marine Mammals: Tugidak is most renowned for its harbor seal population. Tugidak Island has historically supported one of the largest harbor seal populations in the world, estimated at 15,000 to 20,000 animals with peak concentrations of hauled out seals reaching 14,000 at a time. Tugidak Island is also a major pupping area for harbor seals in the Gulf of Alaska with annual production once estimated at a high of 5,500 pups. That population is now substantially depressed but remains one of the largest known. Seals haul, pup, and molt on beaches found along the west and northeast side of the island and in the vicinity of the mouth of the lagoon.

Sea otters are common in the nearshore waters around Tugidak Island. Approximately 400 to 700 sea otters are found in the vicinity of Tugidak Island, with medium to high densities along the south side of the island.

Birds: The interspersed of many different habitat types on Tugidak Island associated with cliff and bluff shores; sand and rocky beaches; spits, bars and tideflats; freshwater streams and lakes; saltwater marshes and lagoons; vast eelgrass beds; freshwater wetlands; and uplands attracts some of the greatest diversity of bird life known to nest on and visit any one island in the Gulf of Alaska.

The island serves as a valuable spring and fall resting and feeding area and as a production area for birds migrating from the Pacific coast of North America. Because Tugidak Island is low, treeless, and free of introduced predators, all birds nest on the ground and are particularly susceptible to habitat destruction, predation, and trampling.

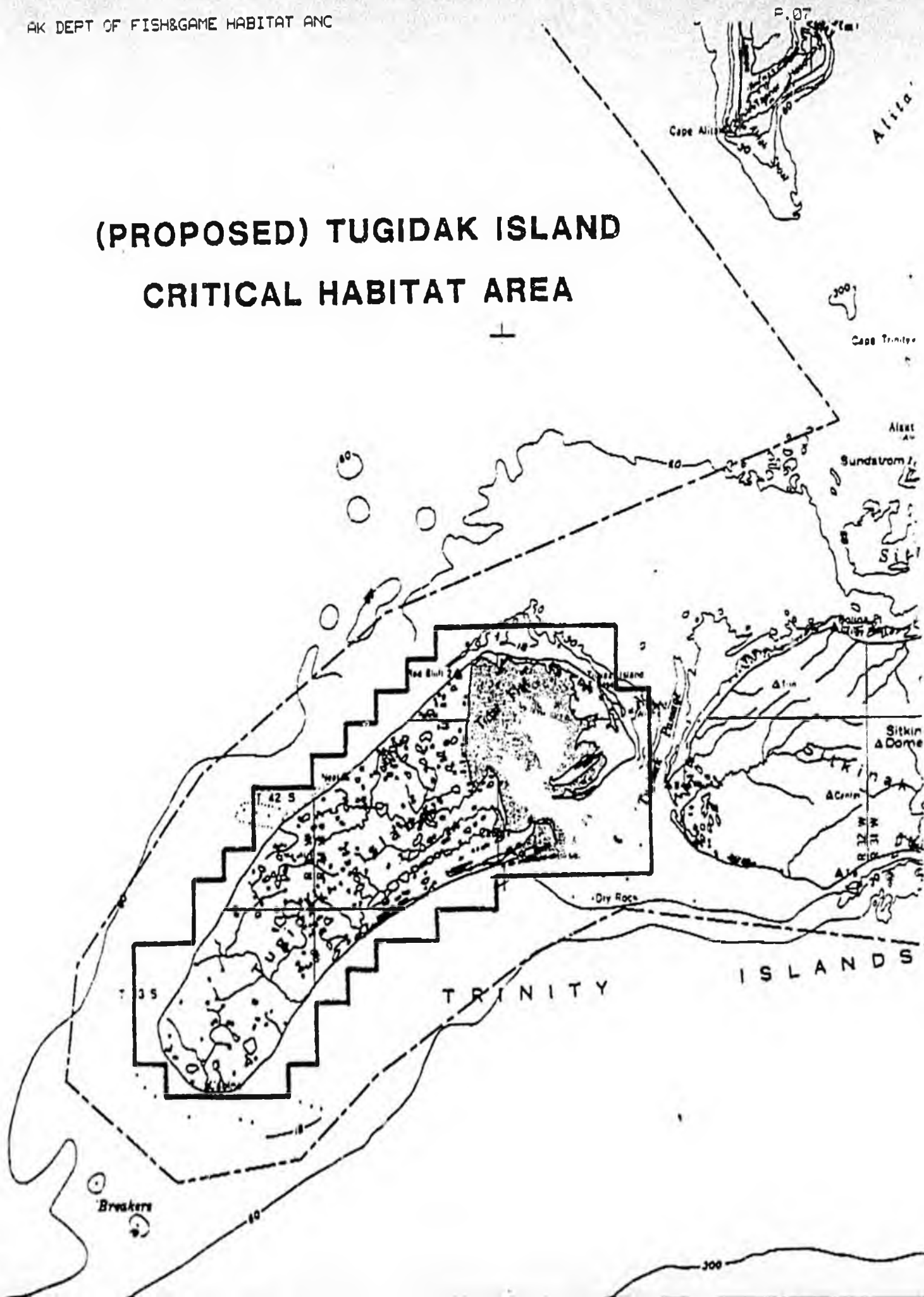
- ° At least 56 species of birds occur on Tugidak Island. Thirty eight species are known to nest there, and 26 of these species are considered common or abundant.
- ° Wetland habitats throughout the island provide nesting habitat for waterfowl, shorebirds, tundra swans and loons, with wetlands habitats along the south shore supporting nesting concentrations of mallards, pintails, gadwalls, green-winged teal and wigeon.
- ° Snow geese concentrate on the island during spring migration to rest and feed.
- ° The lagoon supports spring and fall concentrations of ducks and shorebirds. Black brant and white-fronted geese also concentrate in the lagoon in the fall to rest and feed. The lagoon area provides winter habitat for emperor geese, a species that has recently experienced a serious population decline.
- ° The coastal waters surrounding Tugidak Island are a major overwintering area for waterbirds, primarily sea ducks.
- ° Five seabird colonies are documented on Tugidak Island, totally nearly 4,000 nesting birds. Glaucous-winged gulls are the most abundant seabird, followed by arctic terns, mew gulls, and cormorants.
- ° Of particular significance are records of six ground nesting bald eagles. These bald eagle nests are located on bluffs or slight rises in the terrain throughout the island.
- ° Peregrine falcons are also reported to nest on the island's bluffs.
- ° Several thousand ptarmigan nest in upland areas of the island.

Fish and Shellfish: The lagoon and nearshore waters of Tugidak provide a productive marine environment for several species of fish and shellfish. The island's stream systems provide habitat for anadromous fish.

- ° There are three documented salmon stream systems on the island supporting chum and/or coho salmon.
- ° The lagoon is a productive rearing and feeding area for large numbers of Pacific herring.
- ° Known razor clam concentrations occur along the bars at the mouth of the lagoon.
- ° Based upon frequent observations of small Dungeness crab carapaces and exoskeletons washed up along the lagoon's shores and large commercial catches of Dungeness crab directly offshore of the lagoon, the shallow waters and large eelgrass beds found in the lagoon are thought to provide an important nursery rearing area for Dungeness crab.

Archaeological Sites: Eight archaeological sites have been documented on the island. Although largely unexplored, they appear to indicate abundant prehistoric use of the island, with a majority of the sites located along the lagoon.

# (PROPOSED) TUGIDAK ISLAND CRITICAL HABITAT AREA



# STATE OF ALASKA

**DEPARTMENT OF NATURAL RESOURCES**

**DIVISION OF MINING**

STEVE COWPER, GOVERNOR

PO BOX 107016  
ANCHORAGE, ALASKA 99510-7016

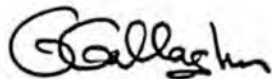
February 24, 1988

The Honorable Fred Zharoff  
Alaska State Senate  
P.O. Box V  
Juneau, AK 99811

Dear Senator Zharoff:

As requested, enclosed is a map showing the location of state mining claims on Tugidak Island. Please do not hesitate to contact me if you need additional information.

Sincerely,



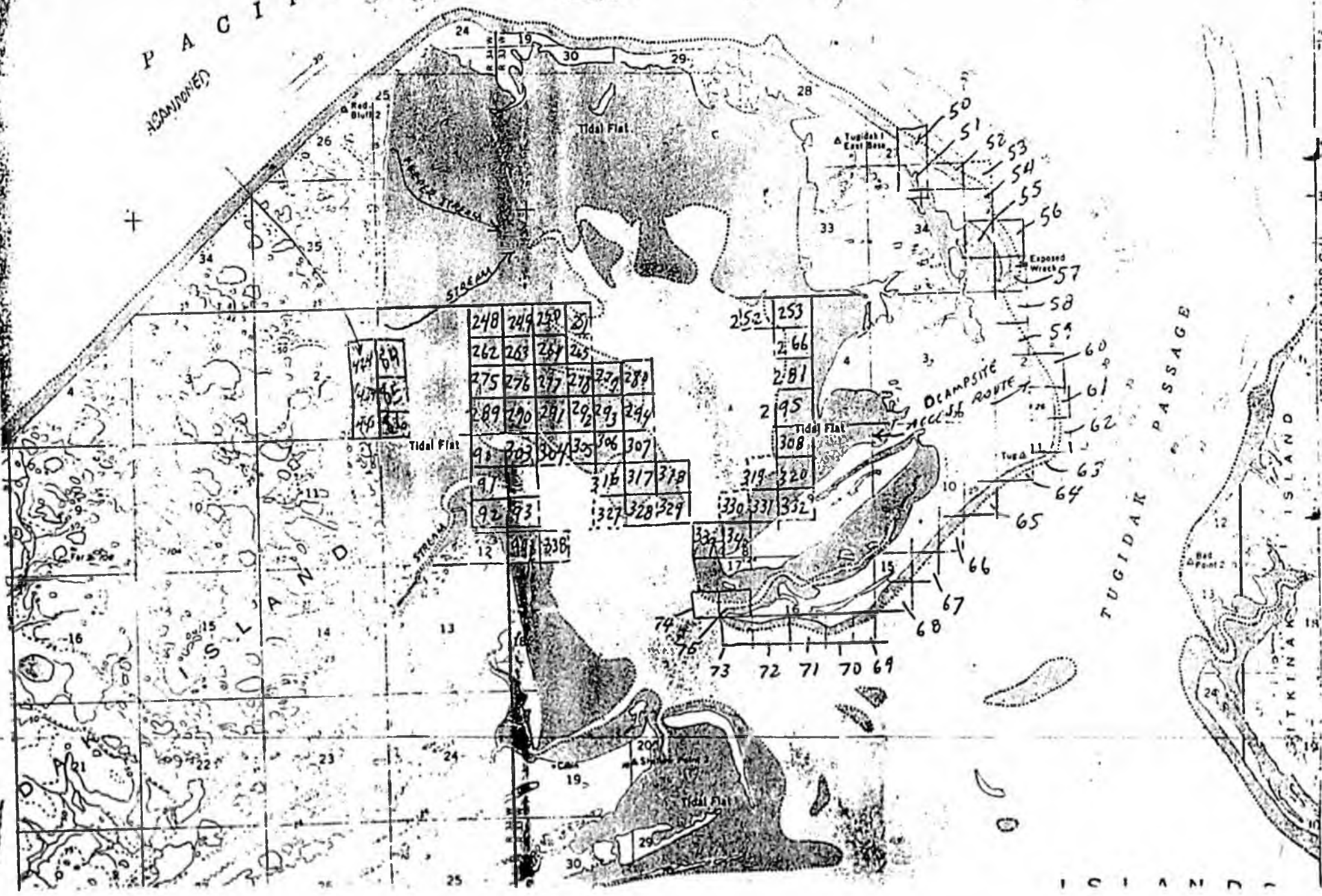
Gerald Gallagher  
Director

Enclosure

OCEAN

PACIFIC

ABANDONED



248	249	250	251
262	263	264	265
275	276	277	278
289	290	291	292
293	294	295	296
307	308	309	310
315	316	317	318
327	328	329	330

252	253
266	267
281	282
295	296
308	309
319	320
330	331
332	333

DEAMP SITE ROUTE

TUGIDAK PASSAGE

TRINITY ISLANDS (I)

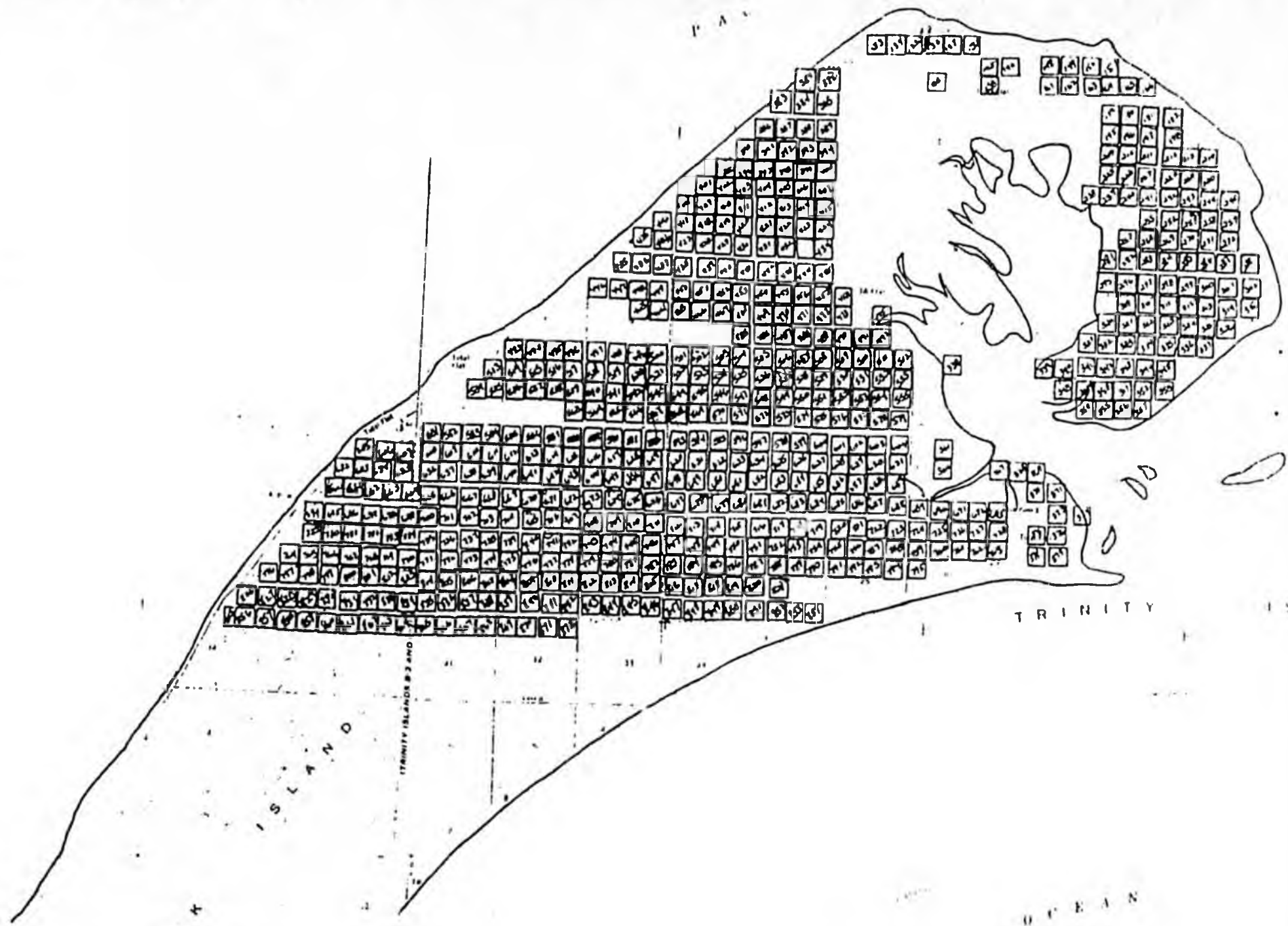
ISLANDS

TRUST 183-872

TUGIDAK ISLAND

USGS TRINITY IS. B-3 & C-3

NOT OFFICIAL COPY



KODIAK AUDUBON SOCIETY  
BOX 1756  
KODIAK, ALASKA 99615

February 29, 1988

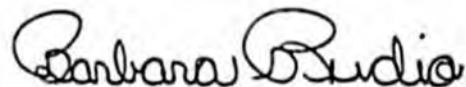
Fred F. Zharoff  
P.O. Box V  
Juneau AK 99811

Dear Senator Zharoff:

The Kodiak Chapter, National Audubon Society, would like reinforce our support for Senate Bill #475, "An Act establishing the Tugidak Island Critical Habitat Area."

Tugidak Island is a unique and special place. Ensuring the protection and enhancement of its fish and wildlife habitat and populations is extremely important to the nearly 100 members of the Audubon Society in Kodiak.

Thank you for introducing the bill. Your continued support of the Tugidak Island Critical Habitat Area will be greatly appreciated.



Barbara Rudio  
Conservation Chairman  
Kodiak Audubon Society

March 28, 1988

Dear Senator Jharoff,

Thank you for the introduction and support of SB 475 concerning critical habitat status for Jugidak Island.

Being such a lovely unspoiled area of the Kodiak Archipelago, I would be terribly disappointed to see it opened to mass mining or other destructive activities. With critical habitat status, I feel the general integrity of the land would be protected through careful monitoring. I appreciate being able to leave unspoiled land for future generations to enjoy too.

Sincerely,

Susan S. Blott

Susan S. Blott

P.O. Box 1244

Kodiak, AK 99615



# United States Department of the Interior

Fish and Wildlife Service  
Anchorage Fish and Wildlife Enhancement  
Sunshine Plaza, Suite 2D  
411 West 4th Avenue  
Anchorage, Alaska 99501

# COPY

IN REPLY REFER TO:  
ANC-FWE

Colonel Wilbur T. Gregory, Jr.  
District Engineer  
Alaska District, Corps of Engineers  
Pouch 898  
Anchorage, Alaska 99506-0898

NOV 13 1987

Re: 1-870437  
Tugidak Passage 1

Dear Colonel Gregory:

The U.S. Fish and Wildlife Service (Service) has reviewed Public Notice 1-870437, dated August 17, 1987. Mr. Gary J. Peterson has requested a Department of the Army permit to perform work in waters of the United States. The project is located on Tugidak Island, Trinity Islands Group, Alaska.

The applicant has modified the original proposal and now proposes to dredge approximately 500 cubic yards of beach sand per day, process the dredged material, and return it to its point of origin. All work would be performed landward of the mean low tide line. Beach material would be worked using front-end loaders, sand pump, or tractor-mounted bucket. A water trap intake pit would be constructed each day by dredging approximately three cubic yards. This material would be stockpiled alongside the pit and returned to the pit at the close of operation. Two work site locations involving five mining claims are currently proposed at the northeast end of Tugidak Island. Materials and personnel would be transported to the island via barge or aircraft. Four-wheeled all-terrain vehicles would be used for island travel. The camps would be located in upland areas near the work sites. The purpose of the proposed work is to extract metallic concentrates for commercial sale.

The Service has long been aware of the extraordinary fish and wildlife resources found on Tugidak Island, especially birds and marine mammals. Originally approved for inclusion into the Alaska Maritime National Wildlife Refuge (Alaska National Interest Lands Conservation Act, Public Law 96-487, December 2, 1980, 94 Stat. 2371, sec. 303), Tugidak Island did not become part of the refuge due to a previous State of Alaska land selection. The Alaska Department of Fish and Game also has a history of concern over protection of the islands's valuable wildlife resources, previously proposing "Critical Habitat" status for Tugidak Island (House Bill 656) and promoting closure of the island to minerals entry and cattle grazing.

Tugidak Island is unique in that it is apparently the largest island in Alaska to remain free of introduced fox. Fox have been released for fur farming on virtually all islands originally free of such predators, resulting in severe adverse impacts to nesting waterfowl and seabirds. Also, unlike most other

large islands with extensive marsh habitat, no cattle or other grazing mammals have been introduced to Tugidak. Cattle grazing has seriously damaged many islands through removal of vegetation and subsequent erosion. The lack of cattle grazing and fox predation are factors contributing to the island's importance to insular avifauna.

Tugidak Island has unusual physiographic features which attract many species of wildlife. Unlike most islands in the Aleutian Arc and Gulf of Alaska, which are mountainous, Tugidak is relatively flat with numerous lakes. The northeast end of the island, the location of this proposal, consists of a large lagoon containing extensive mudflats and eelgrass beds. The lagoon is enclosed by a circular spit with beaches composed of sands and gravel. Above the high tide line, the sand dunes are stabilized by salt-tolerant grasses and many drift logs. Further inland, tundra-like vegetation consisting of crowberry and lichens alternates with freshwater wetlands.

On August 26, 1987, biologists from the Service and the Alaska Department of Fish and Game conducted an aerial survey of Tugidak Island. While many species of wildlife were observed, the following were identified from the air: bald eagle, tundra swan, willow ptarmigan, parasitic jaeger, harbor seal, and Steller's sea lion. On October 15, 1987, biologists from the Service, National Marine Fisheries Service, Environmental Protection Agency, and Alaska Department of Fish and Game conducted aerial and ground surveys around the lagoon. The purposes of the surveys were to confirm the presence of eelgrass in the lagoon, assess anadromous fish usage of three undocumented streams which outlet into the lagoon, survey terrestrial vegetation at the project site, and assess seasonal fish and wildlife use of the area.

Since 1960, several accounts of wildlife observations on Tugidak Island have been written. In one account of bird observations on the island during June, 44 species of birds were noted using the island, with evidence of nesting by 34 species (MacIntosh 1978). Among these, six species of raptors use the island, five of which, including bald eagle and peregrine falcon, nest there. At least seven species of ducks nest on the island, including mallard and northern pintail, and the only record of nesting gadwalls in the Kodiak Archipelago. Nesting density of ducks is thought to be far greater here than anywhere else in the Kodiak region. As many as 30 or 40 tundra swans utilize the island's many lakes for nesting. Tugidak Island exhibits an unusual abundance and diversity of migratory and nesting shorebirds, including the easternmost breeding location of rock sandpipers in Alaska. Nesting colonies of arctic and Aleutian terns and mew gulls are found on the island. Other nesting species of note include a large number of parasitic jaegers and probably the only nesting population of long-tailed jaegers on an island outside the Bering Sea. To summarize, at least 56 species of birds occur on Tugidak Island, with 38 species known to nest there.

Tugidak lagoon is used extensively for staging by migrating waterfowl. Species include Canada goose, greater white-fronted goose, brant, mallard, northern pintail, and American wigeon. This staging area is important to fall migrants about to begin long-distance southward flights. Species staging on the lagoon during the October 1987 field survey of the project area included approximately 600 Canada geese, 1000 ducks of three species, and hundreds of unidentified shorebirds. The entire island is used by concentrations of snow geese during spring migration (Alaska Department of Fish and Game 1985).

The lagoon is especially important in that it provides winter habitat for the emperor goose, a species of special concern to the Service because of recent sharp population declines. The Alaska population of emperor geese has fallen from an estimated fall population of 150,000 in 1971 to 68,000 in 1986 and has declined annually from 1982 through 1986 (Service 1986). Past winter survey counts indicate that Tugidak lagoon provides habitat for approximately 50 percent of the wintering emperor geese in the Kodiak Archipelago. Biologists at the Kodiak National Wildlife Refuge, now charged with conducting winter goose population surveys in the Kodiak area, counted 877 emperor geese on the Tugidak Island lagoon during January, 1987 (Ryan, pers. comm.). An October 1987 survey counted 600 emperor geese on the lagoon. Emperor geese arrive at their winter habitat in September and depart in March. The Service is currently undertaking studies to obtain information on the wintering ecology of the emperor goose (Service 1986).

Tugidak Island supports one of the largest populations of harbor seals in the world, previously estimated at 15,000 to 20,000 animals with an annual production of 5,000 pups (Pitcher, pers. comm.). Alaska Department of Fish and Game survey data indicates that this population decreased by 77 percent between 1976 and 1982 (Calkins and Pitcher 1983). Beaches in the project area are used for haulout during pupping beginning in May and molting through September. Other marine mammals occurring at Tugidak Island include sea otter and occasionally Steller's sea lion.

During the October 1987 field survey, two streams which outlet at the southwest side of the lagoon were found to be used by anadromous fish, specifically coho salmon and Dolly Varden. These streams will be formally documented in the Alaska Department of Fish and Game's Catalog of Waters Important for the Spawning, Rearing, and Migration of Anadromous Fishes.

The extensive eelgrass beds which were observed in the lagoon are thought to be a major nursery area for dungeness crab. The largest commercial catches of dungeness crab in the Kodiak Archipelago occur just offshore of the mouth of Tugidak lagoon (Alaska Department of Fish and Game 1981-1985). The lagoon is also a known rearing and feeding area for Pacific herring (Alaska Department of Fish and Game 1985).

Of the species known to occur on Tugidak Island, the following are designated National and Regional Resource species (Department of the Interior 1983): Canada goose, greater white-fronted goose, snow goose, brant, tundra swan, mallard, bald eagle, sea otter, and coho salmon. Emperor goose and peregrine falcon (Falco peregrinus pealei) are considered Regional Resource species.

In accordance with the Service's Mitigation Policy (Department of the Interior 1981), we have selected emperor goose, harbor seal, northern pintail, rock sandpiper, and dungeness crab as our evaluation species. These species have been selected to represent the habitats for the diverse group of species which utilize the project area. The project area, defined as the area which will potentially be affected by the proposed work and associated activities, includes the lagoon and surrounding area.

The bald eagle, although potentially impacted, is not included as an evaluation species for mitigation purposes, because it is specifically protected by the federal Bald Eagle Protection Act (16 U.S.C. 668-668c).

Based on information about the fish and wildlife resources of Tugidak Island, we have preliminarily assigned the habitats for the evaluation species found in the project area to the following Resource Categories:

<u>Evaluation Species</u>	<u>Resource Category</u>
Emperor goose	1
Harbor seal	1
Northern pintail	2
Rock sandpiper	3
Dungeness crab	3

Resource Category 1 habitats are considered unique and irreplaceable on a national or ecoregion basis. Our mitigation goal for Resource Category 1 is no loss of existing habitat. Resource Category 2 habitats are high value habitats and are relatively scarce or becoming scarce on a national or ecoregion basis. Our mitigation goal for Resource Category 2 is no net loss of in-kind habitat value. Resource Category 3 habitats are high value for the evaluation species and are relatively abundant on a national basis. Our mitigation goal for Resource Category 3 is no net loss of habitat value while minimizing the loss of in-kind habitat value.

Factors influencing Tugidak Island's unique habitat quality include: the lack of introduced fox or cattle; its ability to support one of the world's largest populations of harbor seals; its use by thousands of birds during migration; its ability to support nesting populations of birds not normally found elsewhere in the Kodiak Archipelago; and its support of a declining population of emperor geese.

The potential adverse impacts of placer mining on intertidal beaches and mudflats include the long and short-term loss of habitat resulting from dredging, material stockpiling, road use, camp operations, and dewatering of ponds or creeks for industrial use. Travel through vegetated areas and camp use would not only result in the long-term loss of habitat through destruction of vegetation, but also in short-term disturbance to wildlife along travel routes. Ground-nesting species, such as northern pintail and rock sandpiper, are particularly vulnerable to avian predation following disturbance. To support mining operations on opposite sides of the lagoon, it is likely that travel around the entire lagoon would be necessary in order to obtain fresh water for camp use, or meet aircraft or barges. Unrestricted recreational use of all-terrain vehicles would further contribute to this disturbance. During spring and fall migration periods, low-level aircraft overflights, or barge operations within the lagoon, would cause a short-term disturbance to waterfowl concentrations already under stress from migration.

Short-term disturbance to wintering emperor geese would result from low-level aircraft overflights, barge operations, and beach travel during the September to March use period. Frequent disturbance to wintering emperor geese could result in the underutilization of the available goose habitat, resulting in local population declines.

Harbor seals are sensitive to disturbance while pupping during the spring and molting during late summer. According to Pitcher and Calkins (1979), seals on Tugidak Island seemed particularly sensitive to aircraft. Other forms of human-related disturbances include: all-terrain vehicles, hikers, domestic animals, and boats. During pupping, panic flights into the water may cause separation of females and newborn pups, resulting in the death of the pup. During molting, seals are in poor physical condition and entering the water at this time may have detrimental effects on their health. Because of the importance of all the beaches around and inside the mouth of the lagoon to harbor seals, disturbance would be difficult to avoid during mining operations.

According to project plans, processed material would be returned to its place of origin. We are concerned, however, with the effect that removal and replacement of large amounts of beach sand will have on the integrity of the spit. The physical forces affecting erosion and deposition of sediments on Tugidak Island are not fully understood. The applicant currently proposes to dredge 500 cubic yards of material per day; however, we are unable to ascertain the total amount of material that would be dredged over the life of the project or what impacts would occur to the stability of the spit.

Much additional information is needed before a thorough assessment of the potential impacts of placer mining on Tugidak Island can be made. Informational needs include a complete biological assessment of the fish and wildlife use of the island, and an assessment of the physical factors which influence the island.

The Service believes that there exists a potential for additional placer mining proposals in the future for Tugidak Island. This applicant has already indicated that additional work may be proposed in the future and has staked several hundred mining claims. Also, we are aware of other individuals who have staked claims or applied for local permits. Because of this potential for additional proposals, consideration must be given to assessment of potential cumulative impacts.

Based on the testimony given at recent local public hearings and coverage in the local news media, it is apparent that the potential for mining on Tugidak Island has become a highly controversial issue.

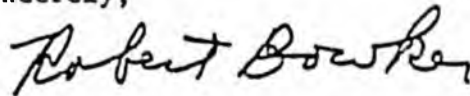
We believe that the potential adverse impacts of placer mining to the fish and wildlife resources of Tugidak Island are significant based on the following criteria: (1) Tugidak Island exhibits unique characteristics as demonstrated by the diverse and abundant wildlife which the island supports; (2) the proposed project has become highly controversial; (3) the potential project-related adverse impacts are uncertain and involve unknown risks; and (4) the action to permit this project may set a precedent for future actions with significant effects. We advise that these issues can best be addressed through preparation of an Environmental Impact Statement.

We recommend that a permit for this or similar projects not be issued pending further assessment of resource value, potential impacts of placer mining development, and opportunities for mitigation of adverse impacts. Once the above assessment has been completed, we will finalize our Resource Category designations and reevaluate opportunities to mitigate adverse impacts to fish and wildlife resources.

We are willing to meet with you and the applicant to explore practicable alternatives where mitigation of fish and wildlife habitat values can be achieved. If you propose not to accept this recommendation, please advise us in accordance with "local procedures" agreed to by our offices.

These comments are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et seq.) and constitute the report of the Department of the Interior. These comments also are for use in your determination of 404(b)(1) guidelines compliance (40 CFR 230), and in your Public Interest Review (33 CFR 320.4) relating to protection of fish and wildlife resources.

Sincerely,

A handwritten signature in cursive script that reads "Robert Bowker".

Field Supervisor

cc: ADF&G, NMFS, DGC, EPA, ADEC - Anchorage

## Literature Cited

- Alaska Department of Fish and Game. 1985. Alaska Habitat Management Guide, Reference Maps, Vol. I. Southwest Region. Juneau, Alaska.
- \_\_\_\_\_. Western Region Shellfish Report to Board of Fisheries. 1981-1985. Division of Commercial Fisheries. Kodiak, Alaska.
- Calkins, D. and K. Pitcher. 1983. 1982 Pinniped Investigations in Southern Alaska. Alaska Department of Fish and Game unpublished report. Anchorage, Alaska. 11pp.
- MacIntosh, R. 1978. Observations of birds on Tugidak Island, Trinity Islands, Alaska, 1-16 June 1978. Unpublished report. Kodiak, Alaska. 16pp.
- Pitcher, K. 1987. Personal Communication. Alaska Department of Fish and Game, Game Division. Anchorage, Alaska.
- \_\_\_\_\_ and D. Calkins. 1979. Biology of the Harbor Seal, Phoca vitulina richardsi, in the Gulf of Alaska. Alaska Department of Fish and Game. Anchorage, Alaska.
- Ryan, K. 1987. Personal Communication. U.S. Fish and Wildlife Service, Kodiak National Wildlife Refuge. Kodiak, Alaska.
- U.S. Fish and Wildlife Service. 1986. Management Plan for the Emperor Goose. Unpublished report. 24pp.
- \_\_\_\_\_. 1981. Mitigation Policy; Notice of Final Policy. Federal Register 46(15):7644-7663. January 23, 1981.
- \_\_\_\_\_. 1983. National Objectives for National Species of Special Emphasis. Washington D.C.

ACT.                      INF.

RM	_____	_____
ARM	_____	_____
P/WB	_____	_____
P/FB	_____	_____
B/WB	_____	_____
RB	_____	_____
ORP	_____	_____
MM	_____	_____
RA	_____	_____
CT	_____	_____
FILE	_____	_____

MEMORANDUM

STATE OF ALASKA

TO: Lance Trasky  
Regional Supervisor  
Habitat Division  
Anchorage

Date: July 31, 1987  
Telephone: 486-4791

FM: Roger B. Smith *RBS*  
Area Management Biologist  
Game Division  
Kodiak

Subject: Tugidak Mining Applications  
A87-3283-Trinity Gold Inc.  
and A87-3282-Gary Joseph  
Peterson

The proposed placer mining operations on northern Tugidak pose some serious threats to both marine and terrestrial wildlife. The lagoon supports eel grass and marine invertebrates, including extensive razor clam beds and rearing crabs which are important to several species of waterfowl, seabirds and other bird species. It is an important feeding, resting and staging area for migrating waterfowl. The adjacent uplands contain the highest densities of nesting waterfowl in the Kodiak Archipelago. A major harbor seal haul out occurs within the area and some pupping occurs on the northern beaches. Major unexplored archeological sites occur in the lagoon.

This is a major mining operation with potential long-term effects on wildlife and habitat. The uplands, where equipment would be staged, are extremely sensitive to erosion (as evidenced by sand dunes). The effects on productivity of marine plants and invertebrates could be substantial from the proposed dredging activity. Direct loss of nesting habitat for many species of birds would occur in any areas with vegetation disturbance or removal (roads, spoil area, camps, pipelines, etc.). Much of the waterfowl nesting occurs in the narrow fringe of beach drift and ryegrass habitat which would be destroyed by the proposed mining of the dunes. Disturbance of seals in critical pupping and molting periods is a likely occurrence. The grapevine has it that an airstrip is also proposed for the near future which would have further impacts on seals, nesting bald eagles and waterfowl.

Before any permits are issued, I believe it is imperative that an on-site inspection of the proposed operation be conducted by DNR and ADF&G. A complete inventory of resource values should be made before an irreversible commitment of this area to placer mining. I believe the magnitude of this operation is such that a public hearing should be held in Kodiak to give the affected public an opportunity to review the proposal.

The Department supported legislation introduced by Representative Fred Zharoff in 1980 to make Tugidak Island a Critical Habitat area. We supported a proposal by Department of Natural Resources in 1982 to close Tugidak to minerals entry. The Critical Habitat bill failed to get out of the committee process and the minerals entry closure was never implemented. Neither bureaucratic nor legislative efforts have thus far been sufficient to protect the unique and irreplaceable wildlife values of Tugidak.

cc: Dan Timm	P. Murray	J. Fall
Greg Bos	R. Blackett	
L. Nicholson	<i>J.</i> Bellinger	

**DEPARTMENT OF FISH AND GAME**

Game Division

P.O. BOX 688  
KODIAK, ALASKA 99615  
PHONE: (907) 486-4791

September 4, 1987

Bob Pederson  
Kodiak Island Borough  
Associate Planner  
Planning & Zoning  
710 Mill Bay Road  
Kodiak, AK 99615

	ACT.	
RM	_____	INF
ARM	_____	JRO
P/WB	_____	K 7/9
P/FB	_____	_____
B/WB	_____	_____
R	_____	_____
C	_____	_____
M	_____	_____
RA	_____	_____
CT	_____	_____
FILE	_____	_____

Subject: Tugidak Island Mining Development

Dear Mr. Pederson:

This letter is in response to your telephoned request for an analysis of the potential impacts on wildlife of the proposed placer mining operations (Case No. 87-046 and 87-047) on Tugidak Island. My comments are addressed mainly to mammals and birds as another division will be addressing the fisheries issues.

Tugidak Island is one of only 2 large islands in the northern Gulf of Alaska which has neither introduced foxes nor a history of livestock grazing. The lack of fox predation and presence of unaltered native vegetation provides ideal habitat for many species of birds. During the 14 years I've been employed as an Area Game Biologist on Kodiak, I've done wildlife surveys on nearly every island from the Barrens to the Semidis. I have yet to discover anyplace that compares with Tugidak Island for birdlife in terms of either sheer numbers or in diversity of species. During a field trip to Tugidak from 9-16 June 1978, 44 species of birds were observed and 24 species were confirmed to be nesting there. Nesting waterfowl including mallards, pintails, green-winged teal, American wigeon and Greater scaup, were commonly found with nests spaced only a few feet apart in the narrow band of beach drift and ryegrass along the north lagoon and nearby freshwater ponds. I have previously seen waterfowl nesting in such high densities only on intensively managed waterfowl refuges in the lower 48 states. An estimated 30-40 whistling swans, including 2 pairs with recently fledged young were also seen there. The island also has high densities of nesting willow ptarmigan.

In January 1987 the U.S. Fish and Wildlife Service observed 1,673 emperor geese wintering on Tugidak, including 877 geese seen feeding and nesting on the lagoon. This species has recently experienced a serious decline in Alaska. Tugidak Island is an important feeding and resting area for migrating waterfowl, including at least 4 species of geese.

Over 12,000 harbor seals have been counted hauled out on Tugidak Island. As many as 4,000 seals have been counted on the northeastern barrier spits and lagoon included in the subject mining applications. Tugidak Island now has the 2nd or 3rd largest harbor seal population in the world although in the 1970's it was rated as the largest in the world. Commercial harvest of seal pups was conducted on Tugidak until passage of the Marine Mammals Protection Act of 1972 which put a moratorium on harvest. Seals are particularly vulnerable to disturbance during pupping activities in late May-June and during moulting which occurs from August through September.

The Department of Fish and Game has long supported greater protection for the truly unique wildlife resources of Tugidak Island. We have previously recommended to Department of Natural Resources that the area be deleted from an existing grazing lease and that minerals leasing be restricted. We supported legislation to designate Tugidak Island as a Critical Habitat area and urged Department of Natural Resources (DNR) to classify it as Wildlife Habitat in the interim. We have consistently requested that DNR incorporate specific provisions to protect wildlife as conditions for issuing previous permits for placer mining on southern Tugidak Island.

The 2 proposed mining applications now under consideration appear to have serious conflicts with wildlife. Dredging in the lagoon as proposed would seriously reduce the availability of marine organisms on which many species of shorebirds and waterfowl rely for food. Natural recovery of the lagoon could take many years and I am not aware of any previously proven artificial rehabilitation that would be either economically feasible or effective.

Mining the beach dunes around the lagoon as proposed would result in long-term and possibly permanent losses of high density waterfowl nesting areas. There are also several nesting colonies of gulls and terns within the proposed mining area north of the lagoon which could be destroyed. The dunes are susceptible to erosion and removal of the accumulated drift logs and beach rye currently stabilizing them could result in severe erosion, possibly resulting in a major alteration of the spit and lagoon.

Disturbance of the seal population is a long-standing concern which we have addressed in previous mining applications. During the pupping period any significant disturbance would cause abandonment of newborn pups resulting in increased mortality and reduced productivity. Seals would be severely stressed by disturbances during the molting period. Abandonment of traditional seal haulouts would likely occur if daily disturbances from heavy equipment, aircraft and off-road vehicles occurred. Previous studies of seals on Tugidak determined that low flying aircraft are a significant disturbance factor.

The Department of Fish and Game has not yet formally reviewed the 2 subject applications, but I expect that we will continue to maintain the position that Tugidak Island should be protected from major alterations of the valuable wildlife habitat there. We have recommended that several specific provisions to protect seals and nesting birds be included in previous mining permits issued for Tugidak. Those provisions included pre-designated travel routes and locations of major facilities; seasonal restrictions on operating;

B. Pederson

-3-

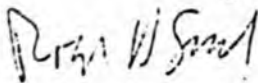
September 4, 1987

prohibition of domestic animals; on-site inspections; aircraft restrictions.

As a footnote, the U.S. Fish and Wildlife Service rates Tugidak as number 1 in their list of priorities among parcels of State lands desired for addition to the National Wildlife Refuge system through possible future land trades.

If you need further specific information let me know.

Sincerely,



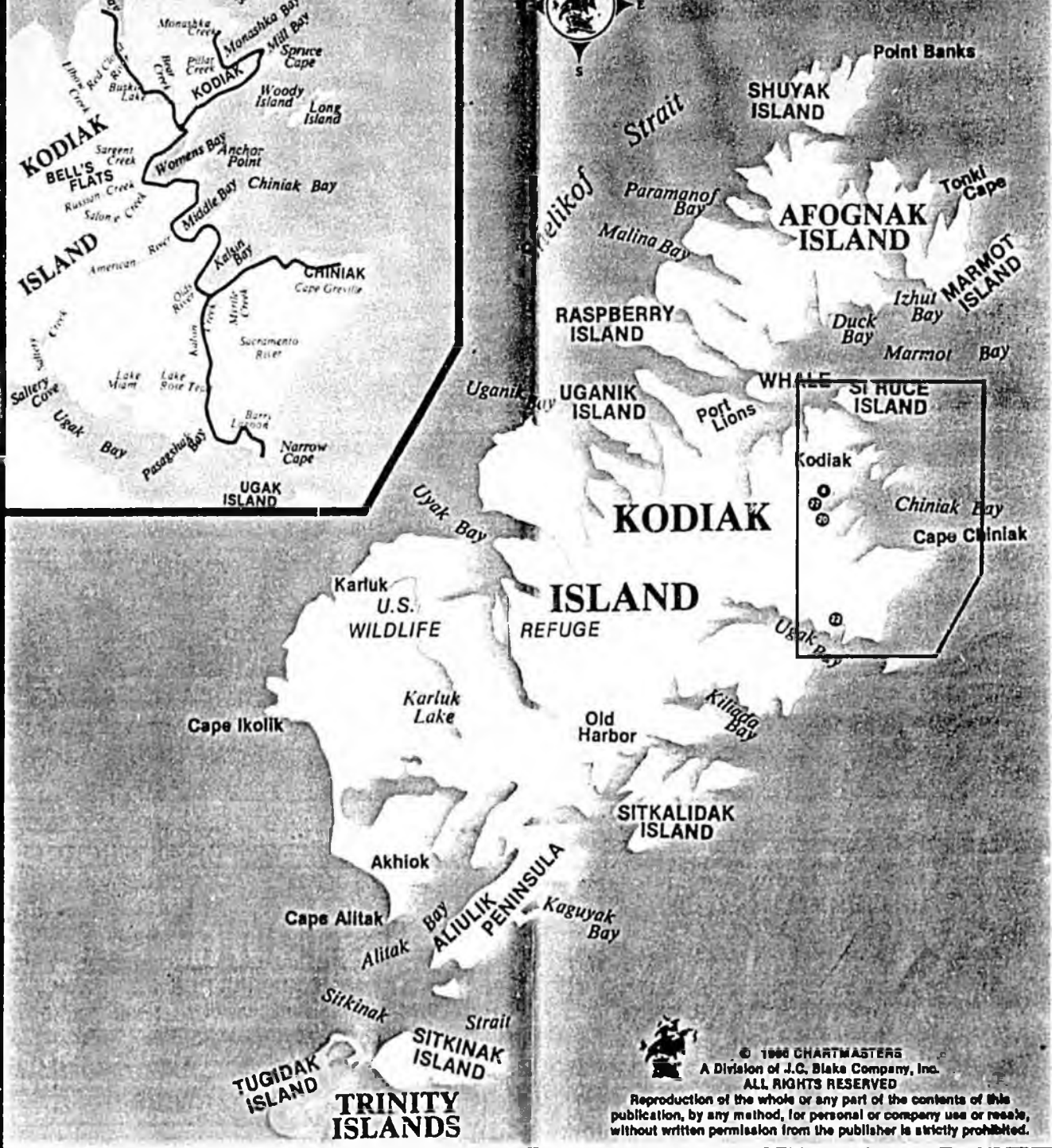
Roger B. Smith  
Area Management Biologist  
Game Division  
Kodiak, AK 99615

cc: G. Bos - ADF&G  
J. Westland - ADF&G  
D. Timm - ADF&G  
L. Trasky - ADF&G

# Road System



# Kodiak Island Area Map



© 1986 CHARTMASTERS  
A Division of J.C. Blake Company, Inc.  
ALL RIGHTS RESERVED

Reproduction of the whole or any part of the contents of this publication, by any method, for personal or company use or resale, without written permission from the publisher is strictly prohibited.