

SB

23

Written testimony in support of SB23 from

**Barbara L. Carlson
Michael P. Carlson
6050 W Dimond Blvd.
Anchorage, AK 99502**

Dear Senator Stevens, Representative McGuire and Representative Rokeberg :

Thank you for your hard work on behalf of Sand Lake, Anchorage and Alaska. We appreciate your determination and careful, deliberate decision-making. The following e-mail and attachments have been sent to Senator Cowdery; Representative Masek; Representative Heinze; Representative Hugh Fate; and Representative James Holm.

Our family stridently supports SB 23. Please do get this protection for the Anchorage Coastal Wildlife Refuge in place as soon as possible. We feel that the establishment of this refuge is one of the wisest of moves for Anchorage with an eye out for our grand-children's great-grandchildren. It speaks to our responsibility to the next generation as well as what kind of human beings we consider ourselves to be. We have great concerns about the careful spending of transportation funds in Alaska. The road in front of our house is full of potholes that must be repaired as many times a year as breakup happens. The edges are also crumbling due to wear. We lack a safe place to walk, run or ride bicycles on this part of West Dimond Blvd, Johdpur, Raspberry Road, Kincaid Road, Jewel Lake Road and Victor Road. Much attention must be given to the fair allocation of funding to all places.

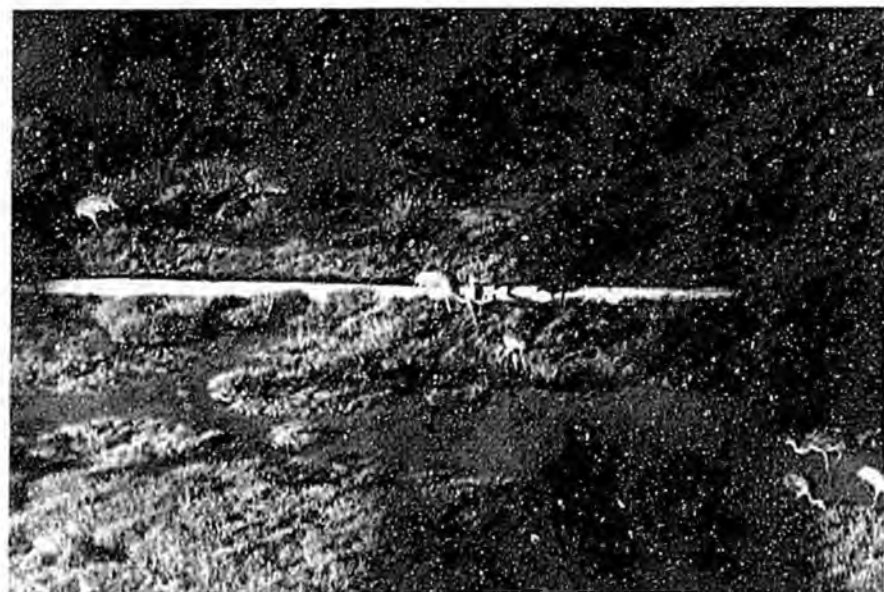
Attached are the following documents for your review:

- draft comments on the South Coastal Trail Draft Environmental Impact Statement by Michael P. Carlson
- Anchorage Coastal Wildlife Refuge: Sightings from a Log by Barbara L. Carlson
- photographs of sandhill cranes feeding, resting & preening within 50 meters of toe of bluff taken from 165' with camera on scope, and photographs of snow geese feeding, resting & preening within 50 meters of toe of bluff taken from 165' with camera on scope

Thank you for addressing this important issue. If there are questions you have please call either of us.

Sincerely,

Barbara L. Carlson
Michael P. Carlson
6050 W Dimond Blvd.
Anchorage, AK 99502
248-2503, 563-8474



Written testimony in support of SB23 from

***Ted and Virginia Volin
1610 Shore Drive
Anchorage, AK 99515***

We would like to thank Senator Ben Stevens for introducing Senate Bill 23 and for his efforts in keeping us abreast of the issues. We would also like to thank Senator John Cowdery, Representative Lesil McGuire and others who have written letters and returned our Email.

SB 23 solves three problems:

- It mends a broken process
- It protects the Anchorage Coastal Wildlife Refuge (ACWR)
- It will save the State of Alaska money over the long run

The Draft Environmental Impact Statement (DEIS) dated November 11, 2002 and entitled "South Extension of the Coastal Trail DEIS" is a bad piece of work.

As we speak, the ACWR is in grave danger from this project.

- The Alaska Department of Fish and Game knows this.
- Land owners with property along the ACWR know this.
- Various environmental and sportsman's groups know this.
- Our cleaning lady, heating technician, friends and most other people in Anchorage know this.

Special interest groups formed by and acting as cheer leaders for the former governor do not care two cents about the ACWR.

These groups are trying to stuff the Orange Modified Alternative route down our throats. The Orange Modified Alternative route, and suggested variations thereof:

- Will do major damage to the ACWR
- Destroy natural settings for 177 bluff properties
- Change the character of several South Anchorage neighborhoods from quiet, suburban neighborhoods to noisy, congested urban neighborhoods.

Your passage of SB23 will send a clear message that you care about the ACWR.

In addition, we hope that you will do what is necessary to bring the Extension of the South Coastal Trail project to a halt until a route can be found which does not destroy the Anchorage Coastal Wildlife Refuge and South Anchorage neighborhoods.

If you have any questions or comments, please feel free to contact us. Thank you very much for listening.

Sincerely,

*Ted and Virginia Volin
1610 Shore Drive
Anchorage, AK 99515*

tvolin@acsalaska.net

242-3029 Mobile

Dave Adams

From: Robert Sloan [bob_sloan@dot.state.ak.us]
Sent: Monday, February 03, 2003 9:08 AM
To: Dave Adams
Cc: 'representative_lesil_mcguire@legis.state.ak.us'; 'Senator_Ben_Stevens (E-mail)'; 'jack_phelps@gov.state.ak.us'; 'James_clark@gov.state.ak.us'; 'Senator_John_Cowdery@legis.state.ak.us'; 'Jeff Parker'; MDalton@hdrinc.com; James M Childers; Steven R Horn
Subject: Re: Cost estimate spreadsheets of South Coastal Trail alternatives

Hello Mr. Adams,

I have provided you cost estimates of the SCT alternatives in electronic format as you requested. In your subsequent e-mail messages you offer your comments and criticism as to the adequacy of the estimates and possible omissions. Your comments will be included in the project's public record to document your concerns. Your comments and questions, along with those of others, will be addressed at the conclusion of the comment period on March 7 and the preparation of the Final EIS.

Back-up computations related to the individual line items of the cost estimates are located at the office of our engineering consultant and will be made available for your review at the following location:

HDR Alaska
2525 C Street Suite 301
Anchorage, Alaska 99503
907-274-2000
Attn: Mark Dalton

Please make an appointment to review the information, as it will take a period of time to consolidate the requested documents. You will have the opportunity to review the documents and indicate which ones you want copied. The Department will then make copies of the document and will provide them to you. The Department charges fees for requested copies per AS 44.25.110. The Department's standard copying rates is \$0.25 per single page, \$1.00 per 1/2-size plan sheet and \$3.00 per full size plan sheet. If the production of the records exceeds five person-hours in one calendar month, you will be required to pay the personnel costs required during the month to complete the search and copying tasks, again per AS 44.25.110.

Sincerely,

Bob Sloan

Dave Adams wrote:

> Part 1. |Type: Plain Text (text/plain)

David D. Adams
1520 Shore Drive
Anchorage, AK 99515

March 4, 2003

Colonel Steven T. Perrenot
U.S. Army Corps of Engineers,
Alaska District, Regulatory Branch (1145b)
P.O. Box 6898
Anchorage, AK 995061

Subject: Notice of Application for Permit Y-1984-0121
Draft EIS for Southern Extension to the Coastal Trail
Estimated Construction and Maintenance Costs

Dear Colonel Perrenot:

I received a copy of Tim Bridgman's March 1, 2003, letter to you. I wanted to add a few of my own comments to Mr. Bridgman's, who concludes as many of us have, that the cost estimates used in the DEIS are fatally flawed.

As Mr. Bridgman noted, the estimate for the Orange Modified (Preferred) Route is \$37.2 million, which includes \$5.2 million for right-of-way acquisition.

Mr. Bridgman obtained a copy of the document Draft Engineer's Estimate for Six Trail Alternatives dated November 4, 2002. I also reviewed the cost estimates, and I agree with all of Mr. Bridgman's findings, except that perhaps he is overly conservative in his assessment of the omitted costs.

Like Mr. Bridgman, I also requested more detailed information on what is included in the estimate since the information I received is at the summary level. This request we met with the reply that I would have to pay Time and Expenses fees to get the background data. Incredible! (See attached email.)

Mr. Bridgman concludes that the full and complete cost of the project is \$65,590,798 just for construction. But he omits the cost of phasing and condemnations (and related legal costs) from his analysis. The DEIS allowance for condemnations is felt to be low by half.

Phasing a project increases costs significantly due to multiple mobilizations and demobilizations, extended project overheads and other costs as you are no doubt well aware. Refer to the attached spreadsheet for a conservative illustration of what will happen to the project cost when the project is phased as the public has been told it must due to lack of funds. Even the so-called "Friends of the Coastal Trail" have advocated for phasing, while hiding the fact that phasing inevitably increases a project's total costs.

When the inefficiencies of phasing and nominal 2% inflation are considered, the full project cost mushrooms to over \$110 million and takes 19 years to complete.

The public has been grossly misled by the \$37 million estimate in the DEIS. But a truth that has emerged is the fact that at \$37 million, the municipality is estimating that the next SIX years of AMATS enhancement monies would be gobbled up by the trail. Simple arithmetic tells us that there is about \$6 million per year available. You will find that figure in the attached calculation.

Mr. Bridgman also addresses maintenance costs. Again, his arguments appear well considered. However, there is another maintenance cost factor he did not mention. The present trails are so poorly maintained that they frequently require major capital improvements in the form of expensive bond issues.

If MOA has omitted the fully loaded costs of repair bonds, which appears to be the case, then they have obfuscated the true cost of maintenance.

Mr. Bridgman concludes as follows:

"The inadequacy of both the construction and maintenance costs undermine the validity of the estimated costs rendering it is impossible to make valid judgments of the Orange Modified Route based on the DEIS. It is apparent to me that the DEIS is a fatally flawed document and that the Corps of Engineers have sufficient reasons to deny the permit application to place fill in the wetlands of the project area."

I fully support his conclusions, and request that the U.S. Army Corps of Engineers and DOT retains FRESH, INDEPENDENT PROFESSIONALS to review all of the comments on the DEIS and to respond to them. The present DEIS authors including the consultants, DOT staff and MOA staff have a natural interest in defending their work product, which is widely viewed as being biased. The Corps and DOT cannot expect the public to have confidence in the handling of the review comments by the authors of the DEIS. Please insist that fresh minds process the comments, including these comments regarding project costs.

Sincerely,

David D. Adams

Attachments:

Bridgman Letter
DOT email 2/3/03
Phasing/inflation spreadsheet

Copies:

Jim Childers, P.E., ADOT&PF
Tim Haugh, FHWA
Senator Ben Stevens
Representative Lesil McGuire
Mayor George Wuerch

TIMOTHY G. BRIDGMAN
240 Pacific view drive
Anchorage, AK 99515

Colonel Steven T. Perrenot
U.S. Army Corps of Engineers,
Alaska District, Regulatory Branch (1145b)
P.O. Box 6898
Anchorage, AK 99506I

March 1, 2003

Subject: Notice of Application for Permit Y-1984-0121
Draft EIS for Southern Extension to the Coastal Trail
Estimated Construction and Maintenance Costs

Dear Colonel Perrenot:

In this letter are my comments on the estimated construction and maintenance costs for the Orange Modified (Preferred) Route contained in the Draft Environmental Impact Statement (DEIS) for the Southern Extension to the Coastal Trail. The Alaska Department of Transportation (ADOT) is the principal sponsor of the project and has filed a permit application with the Corps of Engineers to place fill in the wetlands of the project area.

The estimate for the Orange Modified (Preferred) Route is \$37.2 million, which includes \$5.2 million for right-of-way acquisition. These figures appear in the Summary on page SUM-6 of the DEIS. The cost of the Orange Modified route is the most expensive of the six alternative routes discussed in the DEIS. In this letter I will indicate how this estimate is suspect and may be even greater.

Construction Costs

I obtained a copy of the document Draft Engineer's Estimate for Six Trail Alternatives dated November 4, 2002. The document contains summary costs for the six alignment alternatives and basic quantity survey information including estimated trail lengths; estimated wall lengths and heights; bridge lengths and locations; tunnel lengths and locations; lengths of elevated sections; and estimated quantities for aggregate base, asphalt concrete pavement, unclassified fill and TYPE A borrow.

I have requested cross sections and alignment sheets to determine the elevation of the trail relative to the existing grade to enable me to check cut and fill quantities of material required for the project. I also requested more detailed information on what is included in the estimate since the information I received is at the summary level. This request has not been honored by ADOT so all I can do is to list items of cost that do not obviously appear in the estimate and then figure the costs of these items to come up with a realistic total cost of the project.

Total Project Costs included in the estimate	\$32,050,282
Added direct costs apparently not included in the estimate:	
Temporary road.	Say \$500,000
Excavate and remove unstable material.	Say \$200,000
Fill to replace unstable material.	Say \$300,000
Restoration and Revegetation	Say \$500,000
Contractor overhead and profit. Say 15% of constn costs	\$5,032,282
Total Revised Project Costs	\$38,582,824

Added indirect costs apparently not included in the estimate:

Design fees. Say 10% of construction costs	\$3,858,282
DOT project management costs.	
Say 30% total project costs	\$11,574,846

Design growth. Say 30% of total project costs \$11,574,846
Total revised project costs \$65,590,798

Because this project is in the conceptual stage of design, it is normal to include a 30% contingency for design growth as problems are worked out that were not considered in the conceptual phase.

I repeat that the above mentioned costs have been added because they do not appear to have been included in the estimate. With this caveat, it can be seen that the total project costs (less row acquisition) are twice what is shown in the estimate.

Maintenance Costs

The maintenance costs are indicated in Table 4-7 on page 4-13 of the DEIS.

In response to my request for information on trail maintenance costs, I was given one page of expenditures for 2001 that was spent by the Municipality of Anchorage Department of Parks and Beatification for maintenance. Maintenance costs for 128 miles of trails and walkways are indicated as \$122,718 for direct costs, and \$112,800 for indirect costs and overhead giving a total of \$235,518 for the year 2001. The maintenance cost per mile is therefore \$1,839.

The DEIS indicates annual trail maintenance costs for 13.3 miles of the Orange Modified Route to be \$19,950 or \$1,500 per mile per year. This figure equates to 2 two workers for 2 days per mile per year to perform trail maintenance without materials or equipment. About all that can be accomplished with this work force is to pick up trash and debris.

The proposed trail will be traversing wetlands where it will be exposed to settlement and flooding. Sections of the trail will be tunneled through the toe of the bluff cutting off the natural drainage flow from the bluff to the wetlands. Access roads from the parking lots to the trail will expose the slope of the bluff to soil erosion. These are examples of conditions on this trail that will require maintenance over and above the maintenance of the existing trail system upon which maintenance costs for the proposed trail are based. Any maintenance costs that exceed the \$1,500 per mile per year will have to be financed by bonds that will require approval by the voters.

To summarize:

1. The total cost of the proposed Orange Modified Route is more likely to be \$65,590,078 instead of \$32,050,282 stated in the DEIS due to the apparent omission of some of the project costs that should have been included.
2. The proposed maintenance costs amounting to \$1500 per mile per year will buy nominal maintenance amounting to little more than picking up trash and debris. This misleads the public into expecting that these are the total maintenance costs whereas it is likely that major maintenance will have to be financed by bonds issued by the Municipality

The inadequacy of both the construction and maintenance costs undermine the validity of the estimated costs rendering it is impossible to make valid judgments of the Orange Modified Route based on the DEIS. It is apparent to me that the DEIS is a fatally flawed document and that the Corps of Engineers have sufficient reasons to deny the permit application to place fill in the wetlands of the project area.

In accordance with page 3 of the Public Notice of Application for Permit, I am requesting that the Corps of Engineers conduct a public hearing to consider these and other aspects of the trail design that are deserving of further attention.

Sincerely

Timothy G. Bridgman

Copies:

Jim Childers, P.E., ADOT&PF
Tim Haugh, FHWA
State Senator Ben Stevens
Representative Lesil McGuire
Mayor George Wuerch

Adjusted Coastal Trail Cost - Orange Modified Preferred Route
3/3/2003

\$ 65,000,000 adjusted construction cost as computed by Tim Bridgman
 \$ 10,000,000 adjusted condemnation costs

 \$ 75,000,000 total cost if one phase

25% added direct+overhead costs for PHASING
 \$ 18,750,000 premium for phasing

 \$ 93,750,000 phased cost without inflation

\$ 6,000,000 max funds per year available per AMATS, et al
 2% inflation

Year	Spend	Balance	Inflation
1	\$ 6,000,000	\$ 87,750,000	\$ 1,755,000
2	\$ 6,000,000	\$ 83,505,000	\$ 1,670,100
3	\$ 6,000,000	\$ 79,175,100	\$ 1,583,502
4	\$ 6,000,000	\$ 74,758,602	\$ 1,495,172
5	\$ 6,000,000	\$ 70,253,774	\$ 1,405,075
6	\$ 6,000,000	\$ 65,658,850	\$ 1,313,177
7	\$ 6,000,000	\$ 60,972,027	\$ 1,219,441
8	\$ 6,000,000	\$ 56,191,467	\$ 1,123,829
9	\$ 6,000,000	\$ 51,315,296	\$ 1,026,306
10	\$ 6,000,000	\$ 46,341,602	\$ 926,832
11	\$ 6,000,000	\$ 41,268,434	\$ 825,369
12	\$ 6,000,000	\$ 36,093,803	\$ 721,876
13	\$ 6,000,000	\$ 30,815,679	\$ 616,314
14	\$ 6,000,000	\$ 25,431,993	\$ 508,640
15	\$ 6,000,000	\$ 19,940,633	\$ 398,813
16	\$ 6,000,000	\$ 14,339,445	\$ 286,789
17	\$ 6,000,000	\$ 8,626,234	\$ 172,525
18	\$ 6,000,000	\$ 2,798,759	\$ 55,975
19	\$ 2,854,734	\$ -	\$ -

		\$ 110,854,734	total true cost with phasing and inflation

Anchorage Coastal Wildlife Refuge: Excerpts from a Log

...from a personal log and a long series of e-mails among wildlife stewards. It pleases me to have the opportunity to share some of the sightings that have enthralled my family during the past years since we became aware of the Refuge and its many visitors and inhabitants. The fervor to annotate sightings increased when a neighbor told me that some people believe the ACWR to be a desolate and barren place devoid of wildlife. We are deeply grateful to those who had the foresight and intelligence to set aside this Refuge. The creatures you read about here are but a small fraction of what is out there, for as I discover time and time again, if I am not looking, I am missing something.

© 2002 Barbara Švarný Carlson
PO Box 220196
Anchorage, AK 99522-0196

2001:

Sunday, April 29, 2001 @ 10:20 PM: Listened for frogs. There was a squirrel chipping loudly, so I tried not to move. Gulls were having some feeding frenzies out near the tide line on and off. It was an unusually still and quiet night, except for the wildlife. The temperature reached 60 degrees for awhile on the bluff during the afternoon. By 10 it was closer to 47. I may have heard 3 or 4 frogs, but I cannot be certain. The faint quack croaks, if that's what they were came from slightly to the east and slightly to the west, about 160 feet below here. Do you know if there are any web sites that have recording bites of our wood frog that folks could listen to? I would think that with all the crane calls a frog would be somewhat intimidated. The night was punctuated with the sounds of cranes.

Outdoors, I was thrilled to see 9 Sandhill cranes, *Grus canadensis*, fly overhead, when I had just heard a couple calling. They flew in lazy circles; first one way, then the other; covering a wide area for over ten minutes before they disappeared over the house. Had I not been outside I would have never seen them.

Monday, April 30 @ 8:30 AM: A Red-tailed hawk, *Buteo jamaicensis*, and a raven, *Corvus corax*, put on quite a show in the large old cone-laden conifer to the east side of here just partway down the bluff. The hawk was diving and threatening the raven repeatedly coming within inches as it reached out its claws. The raven preened its feathers nonchalantly while the hawk took 5 or 6 circles swooping in each time for a swipe. The Red-tailed hawk was a perfect and beautiful creature, flying close to the window so many times that I was able to get a good look at the markings, the shapes of the head, beak and tail. The whole interaction was silent--no sound. Suddenly, the raven shook itself and took off westward just above the bluff. The hawk followed.

One Swan--don't know if it was a Trumpeter or Tundra. When I see swans I am just so stunned by their beauty and grace that I can hardly move. I thought to grab the scope for a clear view or the camera to record it, but could only gasp and watch it as long as I could see it as it flew westward just below the level of the bluff. I ran outside to see if perhaps there were others, but I saw none. Could have just missed them. Saw a small group of Snow geese, *Chens caerulescens*, flying westward low over the mid marsh area. Saw many small groups of Sandhill cranes, *Grus canadensis*, flying and landing at various points in the grassy and ponded areas both from the east and from the west. It is a noisy wind tonight and we had a light rain peppered with a moment of sleet. Not a good night for hearing frogs. Temperature is about 43 degrees, but it feels more like 33.

Rick Sinnott wrote on May 2001:

I don't know if you are in a frog-friendly location. Try some of the small ponds in town for examples. I haven't heard any yet this spring, but I haven't been out in the evening at likely spots.

Tuesday, May 01, 2001 @ 9:34 AM: We are in a known frog habitat as a reliable gardener neighbor said he has had frogs in his garden and woods since he moved here. As a simple nature enthusiast new to this area my current focus is to learn about and document the ACWR which is near where we have chosen to live, so I won't be going out to sit at other potential sites. If I had more spare time, I might, but I don't. Since I do most of my work (writing & research) from our place, I have wide windows of viewing opportunities all times of day and night that most folks who work away from home would not have. It is distracting, though--wonderfully so. I just found that my husband photographed those fat, happy coyotes last spring that napped near some Sandhill cranes standing in a pond. It is a long way down there, but they can be seen napping on the log and cavorting around all sides.

Rick Sinnott wrote: I think those coyotes ate most of the crane colts in the refuge last summer.

bc wrote: That could explain why they were so fat and lazy. The date of that particular viewing was about the middle of April last year. We have noticed that coyotes we see here are uncharacteristically (by popular notion) fat. So much so, that we did not recognize at first that they were coyotes.

Bob Brock wrote on Tue, 01 May 2001 @ 10:11AM:

Coyotes used to live at the abandoned sewage outfall just south east of the mouth of Campbell Creek." I have photos...anyway they since moved and appear to be home based in a stand of trees near the peat pile. I have rabbit parts in yard all the time and one coyote was howling in the front of their driveway several weeks ago...absolutely fearless...neighbors have a rabbit hutch, which draws them....

Smiley Shields wrote on Tue, 01 May 2001 @ 14:24:

If you want to hear frogs I know of two places where their vocal efforts are pretty much peaking right now. One place is the trail on top of sub-grade dike at the west end of Klatt Bogg. If you go in from Klatt Road until the second sign--which is almost to the houses---there is a pond on the eastside of the dike that has lots of frogs that are croaking. Also, yesterday I rode my bike along the railroad tracks from the rifle range to Oceanview. It was sunny and in several places frogs were calling. About the loudest that I have ever heard them here in Anchorage. Enjoy,

Wed, May 2, 2001 @ 9:02 AM:.... Thank you for the information. About what times of day did you hear these? Do you know if these would be the wood frogs mentioned in the Daily News article two Sundays ago? Thank you much!

Smiley Shields wrote on Wed, 02 May 2001 @ 11:04:

These are for sure wood frogs because this is the only species of amphibian that lives this far north. I found one crossing Shore Drive right where the old gate was on Monday when I went out for my bike ride.

I have heard frogs at all times c. the day. However, these frogs are of course "cold blooded" so their ability to be active, which includes the males calling, is affected by ambient temperature. I think the prime time to hear them is on sunny afternoons--good luck!. Another biologist I know told me he thinks that calling at night may be very dangerous for them because of horned owl predation. After all, nights up here are horribly quiet, with no crickets, etc., to entertain us. They would be very conspicuous. Cheers,

Saturday, May 5, 2001 @ 7:10 AM: Could hear cranes off and on the last stormy days although they were not easy to spot in the sometimes driving snow. 2 Sandhill cranes, *Grus canadensis*, are standing near the deep pond area preening as they stand very close to the water, which appears to be frozen.... Also on Thursday, we had several more glimpses of the Northern harrier, *Circus cyaneus*, flying low through the trees down the bluff and just above the bluff. Its white feathers are very much highlighted in the reflected light off the snow. The snow and fog were so thick for awhile on Friday that I could not tell if the

large birds flying over were swans or cranes--they looked swan-ish, but I just got a ghostly glimpse. Such-a-weather!" as my grandmother used to exclaim.... 9:33 PM: The songs of the cranes warm the cold of this grey early May.

Sunday, May 6 @ 6:15 AM: Watched for belugas for awhile when the tide was fairly high, but saw none. I was awoken by the sounds of numerous small groups of gulls that fed noisily along the shoreline, some diving and feeding; others walking the median area. They appeared to be Glaucous-winged, *Larus glaucescens*, and Mew gulls, *Larus canus*. 9:40 AM: Two Bonaparte's gulls, *Larus philadelphia*, flew straight up over the bluff allowing me an almost unavoidable chance to view. This may be the tern that I thought I saw a week ago.... 2 PM: A few Sandhill cranes, *Grus canadensis*, can be heard frequently, at all hours of the day and night.

Monday, May 7, 2001 @ 6:25 AM: 26+ White-fronted geese, *Anser albifrons*, feeding in the deep pond area that is nearly covered by the high tide. This is the largest group of these geese I've seen this year in the ACWR. Most show the black belly markings of more mature birds. There was a noticeable face-off of a pair of Glaucous-winged gulls and White-fronts, ending in both pairs not crossing the line, but feeding parallel--keeping their distance from one another.... I see no belugas.... While the fowl are close in because of the tide, the light is grey, so distinctions are harder to view. 7 AM: Have been hearing Sandhill cranes, *Grus canadensis*, all night and morning off and on. A pair flew in and landed just below here to call in response to others in vicinity. They were even closer in to the bluff than the White-fronted geese. 8:50 AM: The tide is receding and the myriad of gulls are noisily feeding on tiny fish left behind. This is the first time I have seen them feed in the deep pond area. 9:35 AM: Sandhill crane feeding vigorously in tall grass near bluff, stopping occasionally to listen to other crane calls and watch the woods vigilantly. I do not see the predators, but the tide should surely have lured them near as well with all the noise of the feeding frenzies. The White-fronted geese have also moved even closer in, but move quickly out of the way when the crane comes through.... If it warms up, as it should, those frogs should start making noise again.

9 PM: Just past high tide, I see a flotilla of about 14 Barrow Goldeneyes, *Bucephala islandica*, way far out there drifting westward with the current. Makes me wish I could see better.... 9:45 PM: A large Alaskan hare, *Lepus othus*, mostly grey-brown by now with white feet and underparts, made vocalizations and scampered through the yard and over the bluff in fear for its life. I saw nothing follow. Whew! It would be more usual to see a Snowshoe hare here.

Tuesday, May 8 @ 5:45 AM: Got up to scan for belugas: Thought I saw some small flashes of white so I pulled out the scope. It was floating ice.... The gulls are feeding everywhere on little silver fish. In the deep grass feeding close to the bluff are mostly Canada geese, *Branta canadensis*, with a few Sandhill cranes, *Grus canadensis*. 8:30 AM: Tide is receding. Sounds of Sandhill cranes can be heard to the west and just below here. 12:10 PM: A robin, *Turdus migratorius*, is singing his heart out in a dead birch tree at the top of the bluff. 1 PM: large hawk above bluff, view obscured by sun, so was unable to identify. Sandhill cranes can be heard at various points below but are hard to spot. 3 PM: A great scattering of waterfowl and shorebirds when a hawk dived down and successfully nabbed something about 160 feet down and just east of here. Could not identify the hawk or the prey, but something definitely got 'et.

Rick Sinnott wrote on Wed, 9 May 2001 @ 13:47:

Thanks, Barbara. Only snowshoe hares and feral European rabbits in Anchorage.

Wed, 09 May 2001 @ 15:54: So, would the feral European rabbits be larger than the snowshoe? This was a really BIG rabbit. bc

Rick Sinnott wrote on Thu, 10 May 2001 @ 14:54:

They can be large. Because they were pets, many are still colored funny (black, pinto, chocolate, silver gray). But some have reverted to the natural brown color. Some still have floppy ears.

Wednesday, May 9, 2001 @ 8 AM: Pod of 11 or more belugas, *Delphinapterus leucas*, feeding at mouth in channel of Campbell creek on slightly incoming tide. They are cruising slowly westward. I see at least two immature with the group. I knew they should be out there, so it is both a relief and a delight to see them!

Rick Sinnott wrote:

Great, Barbara. Keep a record of how far they get up the mouth of Campbell Creek (maybe you can sketch an "S" curve that looks like the creek from your angle and note beluga positions and dates on it).

Wed, 09 May 2001 @ 16:27: I'll do that. The channel does move around a bit and I can only see so far. They have actually gone up as far as I can see from here and probably farther according to local lore. 10 PM, Wednesday, May 9: I spent much of my viewing time today trying to spot the belugas again as last year we saw them here by May 3. The light was not good and the whitecaps made viewing difficult, so they may still have been out there, but I could not see them....[I did not realize at the time that these belugas stay here year round.]

I would appreciate hearing particularly of other beluga sightings near here asap after that sighting so that might help me find them if they are heading this way. Last year I saw them mostly feeding at high tide in or near the mouth of the Campbell Creek and also swimming back and forth mostly west, but sometimes east of here. I have seen them up as far as I can see here [which is nearly to the bluff where the creek cuts in towards Campbell Lake]. I remember being alarmed that perhaps they shouldn't be up that far as they might get stuck, but someone else told me that they had seen them up even farther and never heard of them getting stuck there.

Wed, 09 May 2001 @ 9 PM: We've got squalls and whitecaps out there now, so it will be very lucky to spot the belugas again unless conditions change. While watching for one critter it is unavoidable to miss or not be able to focus on the others present. Sometimes, too, I just watch and do not attempt to record. The last days we have seen many raptors carrying their food up from the Refuge. Last night at 6:50 I saw a Peregrine falcon, *Falco peregrinus*, bring something up and disappear into the conifers with its wings beating strongly. Whatever it was, it was a little heavy. I would not be surprised to find bones and bits of flesh dropped here and there when working outdoors....

Bob Brock wrote on Thursday 10 May 2001 @ 09:07:

Belugas go all the way to the weir in Campbell Creek...no problem they've got the technology...I have seen them 2 to 3 miles up stream from the mouth of the 20 mile river on the flood tide.

Thu, 10 May 2001 @ 09:10: Thanks, Bob. Where, is the weir? How far from the flats? From here I see until my view is obscured by trees to the east. There is a small pile of junk at the east side of a bend in the creek just before it appears to fork or go around an island.

Bob Brock wrote on Thu, 10 May 2001 @ 09:50:

The pile of junk is the old sewer outflow I believe. Up until the mid-80's there used to be toilet paper strewn along the outflow canal in Oceanview--don't know what Campbell Creek situation was.

The weir is maybe 50-75yds west of dam...this is where the sewer line now crosses the creek...the weir being beneath it...in the summer the surrounding grasses are knee deep in water...the whales obviously corner the salmon near the weir...the mouth of the creek has heavy silt deposits like any delta and is shallow.... The sewer line/weir is probably ten +/- feet wide....

....I've seen whales feeding on the west side of Fire Island and have seen them come through the Point Campbell/Fire Island slot but you would think the salmon would return to the mean low tide

mouth of Campbell Creek directly which would be about 6-7 miles bearing about 250 degrees from the high-tide line and climb the creek from that point. And it would follow that the whales would follow them. When the tide turns from ebb-to-flood at the entrance to Turnagain (Point Possession/south end Fire Island) a significant period of time elapses prior to the flood current overwhelming the ebb from the arm, so, maybe they do go the long way around...I'm sure there are some folks from Tyonek who know...they probably came over on this side to hunt them...

Thu, 10 May 2001 @ 10:04: ...Thank you kindly for the response of your experience and speculation. Knowing when and where to watch are key. Sometimes I think that it is just a feeling that I have when I see something "that should be out there" then realize that I was acting on a library of information, perhaps cataloged a little loosely for cognizant retrieval. The more clues we can add, the better our actual knowledge about the lives of these beautiful creatures will become. I do not want to disturb nesting birds now, so I won't be going down there on foot, but I might see if there are other spots where I can get a better view closer to the weir. If anyone can tell me where that might be it would be great. The high tide is very noticeably lower today. Been watching since dawn, but see no belugas. There are some tiny whitecaps out there just the size of the little whales, which confounds the search....

Bob Brock wrote on Thu, 10 May 2001 @ 10:29:

the hooligan are running so the whales are probably down at the 20mile...Campbell Creek will start having reds return in June? And the belugas will probably show up. Also, kings are returning to Ship Creek...and I think Little Susitna has a run, so, they're probably hunting there as well....

bc wrote: Nesting birds like Sandhill cranes will not continue to nest or feed in an area where they are disturbed. This is a much smaller group about which not much is known and so should be protected. Snow geese will not even feed adequately if disturbed. They came here from Wrangell Island north of Siberia! There is more, but I think that is reason enough. Biodiversity is crucial to the health of the planet.....

Bob Brock wrote on Thu, 10 May 2001 @ 12:30:

I think hooligan may enter the Chickaloon as well, otherwise why would a village have existed there? Fish/game would know....out

12:30 PM: Two pairs of Northern pintails, *Anas acuta*, are in the shallow water and deep grass below here. I can hear, but not see American widgeons, *Anas americana*, from east and west and below here.
12:45 PM: Magnificent hawkish bird flew right in front of me, calling, about 15 feet above the bluff. It sounded like a Gyrfalcon, *Falco rusticolus*, (I listened to the Alaska birds CD.), but looked like a Rough-legged hawk, *Buteo lagopus*. It dived and disappeared, obscured by trees, to the west of here down towards the base of the bluff.
10:44 PM: 6 Trumpeter swans, *Cygnus buccinator*, flew by quietly westward just above bluff level out over the grassy area. The light was fading fast but I could see that at least two were immature and all had black or dark beaks with no yellow spots. Was just going to check for belugas one more time. The tide was high about a half-hour ago and all night there have been more gulls than ever this year. They have been noisy and feeding widely. The most can be seen in and around Campbell Creek clear up as far as I can see from here--and near shore in the salt water to the west of here for about a mile....

Bob Brock wrote on 5/11/2001:

We told you we spotted the dead gray whale below your place a couple years ago when Mike Jens, Sinnott, Shawn Lyons and I and others walked the route? So, unbelievably bigger whales coast along your shore.... Thanks again for all your efforts....

Friday, May 11 @ 7:30 AM: A Sandhill crane, *Grus canadensis*, is silently standing in a mirror still, clear, shallow pool just to the east below here. It is preening and feathers can be seen floating. The light is good and its reflection is almost identical to its actual self. Last night around 8 I saw a pair in the same area; the male was doing a stunning courtship dance. A small flock of shorebirds joined, probably,

Greater or Lesser yellowlegs, *Tringa melanoleuca* or *Tringa flavipes*. Hard to tell unless they are together.

8:45 AM: The gulls are beginning to gather on the incoming tide. Time to watch for belugas.... 9:33 AM: Mature Bald eagle, *Haliaeetus leucocephalus*, flying midway down the bluff level next to it over the marsh westward. A Northern harrier, *Circus cyaneus*, appeared to shadow it about 15 feet higher and 50 ft behind.... 11:15 AM: More White-fronted geese, about 26, flying westward over tideline. Sandhill cranes are in the tall grass area nearest the bluff -- from Campbell Creek and west of here I hear several calling from time to time. I just heard the same type calls that surrounded the courting dance last night.... 8 PM: Moose twins--very cute--one getting down on his knees to get his nozzle into my *Anemone narcissiflora*. If the Seagull flower is still there I shall build a better cage tomorrow. 11 PM: Watched for belugas on the incoming until high tide when the light was fading to no avail. The gulls were thick again all up, down and in Campbell Creek as well as out into the salt water and down along the muddy coast westward.

Saturday, May 12, 2001: Sandhill cranes, *Grus canadensis*, were singing songs in the vanishing light. We could hear them still at midnight. No belugas were sighted despite another evening of an abundance of gulls. When we last scanned the waters around 11:15 PM they floated the length of Campbell Creek that we can see and the invisible river that runs out westward near the tideline a mile or so.

Sunday, May 13 @ 8:50 AM: 4 swans flying westward, far out over the mudflats. They disappeared and one of us thought they might have landed, but could not see where. Has anyone been able to verify that Tundra swans have come through yet or has it been mostly Trumpeter swans? Usually I don't have time enough to study them and usually they are quiet. How many swans have been seen in the ACWR this year? ...We'll be watching for those cranes reported to the east of here. I have never seen that many cranes in my life. The buds are starting to burst here, too, and wistfully, we shall not be able to see as much as the trees and shrubs start to leaf out.

Rick Sinnott wrote on Mon, 14 May 2001 @ 08:20:

Thanks for the notes. I think you or Dave Adams has the record for most swans seen at one time this year (10 or 20 I think). Tundra swans come through here, but they are usually in larger flocks and earlier. It's likely that most or all the swans you've seen this spring have been trumpeters. Early last week I counted 140 cranes in a flock off the end of Johns Road. The same morning I saw another 40 or so cranes in other parts of the refuge.

Mon, 14 May 2001 @ 11:17: That would have been Dave since I have not seen that many swans together this year. Last year I saw them resting and feeding just below here, but this year, either I was not looking when they stopped or they did not stop. Neighbors a mile or so south report seeing swans lately, so they must be still coming. Wow, that must be quite a sight to see 140 cranes at once! I think there may be quite a few more than we can view from here sometimes, but each perch has its advantages and disadvantages.

Thank you for the response on the swans.... Yesterday we got a rare close, quiet look at a lovely Golden-crowned sparrow, *Zonotrichia atricapilla*, that apparently had flown into our window and killed itself. No other birds have done that in the 20 months we've lived here. This morning was the first time this year that I have seen swallows here. Did not see it close enough to identify....

Monday, May 14 @ 10 AM: Zig-zagging over the pond area widely, a Common snipe, *Gallinago gallinago*, its winnowing display call was the identifying factor as it was flying too quickly and wildly to keep it in the scope. I did not know what this bird was last year as I tried to catch a glimpse of it as, like one of my neighbors described this morning, it flew over the bluff 'laughing at me.' It truly helps to know what other folks are seeing and hearing here so that I know more about what to watch for being relatively new to the area.

Sun, 20 May 2001 @ 5 PM: I hope you caught Mike Doogan's column earlier this week on the solitary singing *Turdus migratorius*. It was darn good. The hooligan article in today's Anchorage Daily News

made me wonder again what the gulls have been scooping up here the last weeks. Even though the tide has not been in that far for several weeks the gulls have been diving and plucking something out of the deep pond area till this week. Don't see any today, but then, the water level in the pond area is lower with the drying winds and lack of flood tides. While I'm on the subject, Rick, your letter to the editor was right on. Great commentary on that article that put all the blame on the raven and none on the industry! You did well. Yesterday when we were clearing deadwood we saw an Osprey, *Pandion haleaetus*. It was soaring high over the bluff traveling in an eastward direction. It was about 3:30 PM.

Rick Sinnott wrote on Tue, 29 May 2001 @ 11:56:

I'm looking for crane nests. Do you think the folks that walked through last week found it? If so, I'll leave it alone, but if not I'll try to find it. I've heard of Plantskydd but haven't heard how it works for moose. It may attract bears.

Tue, 29 May 2001 @ 12:28: The approximate location of the Sandhill nest would be about halfway between the condos ... & Campbell Creek, out in the grassy area more than halfway towards the mud. Have no idea if the folks last week found it. This would be about the same area we heard them at last summer. Michael said they did not leave, but one was definitely trying to look like it was leaving as it was alarmed. He skirted them widely.... Too bad about the Plantskydd. I guess there are no quick & easy solutions to keeping shrubs that look like dinner to the local critters. 17:01: Bob Brock said there were multiple sightings of a black bear around John's Park this weekend. Rick Sinnott speculates it is a 120 lb. male that should not be a problem unless folks overreact.

Dave Adams wrote on Fri, 1 Jun 2001 @ 14:15:

....There is a cow moose parked out behind our place in the ACWR with a BRAND NEW calf. The calf can barely walk, and when it does, it's as clumsy as can be (the term being normalized for normal moose gracefulness). It must be very freshly dropped. It was suckling very enthusiastically. It has to tip its head back reach way up to find mama's milk, so small is this little critter.

They are right out in the middle of the marsh, as if mama is looking for the maximum visual buffer between her and the calf and any potential threat. Even when they lay down, she remains attentive, looking this way and that for unwelcome company.

Fri, 01 Jun 2001 @ 14:40: Wow! Those could be some of the big tracks we see way down there. Makes sense. Michael saw a mama moose nursing two calves in our driveway the first month we moved here. He said she walked out into the middle and just stopped and waited for them to come out of the woods to her.

Jeff Lowenfels wrote on Sun, 3 Jun 2001 @ 12:58:

There is a black bear wandering around. He is not shy either....

Sun, 03 Jun 2001 @ 22:05: We have been getting cautions from neighbors for several weeks that there were bears frequenting the neighborhood & today there were many reports. At 10:10 PM we finally saw more than tracks or scat. A beautiful, sleek, young black bear scooted through our place in view of all four of us from the windows of our place on West Dimond (not even stopping to sniff the shrubs sprayed a week ago with Plantskyd). I was at the computer and heard a slight rustling and rose to look down. The blackie was traveling in an eastward direction through the woods and up the retaining wall stairs....

Tue, 05 Jun 2001 @ 9:22 AM: The small handsome black bear, *Ursus americanus*, that went through around 10 Sunday night came back along the bluff side of the house about a half-hour later, paying the place no mind. A workman told us Monday night that he saw a black bear earlier in the day at a neighbor's place shortly to the west of here--just minding his own business, acting like a bear.

One son and I speculated that since the bear came right through an area where I had been gardening and watering we would easily find some footprints. We thought we would take an impression and make a mold so that we could cast them for art of place for posterity. We found no tracks, so it must have been pretty light-weight. Or, maybe--enlighten us if you are a bear enthusiast--when they are on the move they can leave no tracks. Could this really have been the 120 lb. male or would that one surely have left tracks in disturbed topsoil mixed with the local sand?

There are a number of large bees of some sort exploring the high eaves of the house. We have seen more butterflies than we have before anywhere else in Anchorage this year in this location. I do not have an insect field guide so I'll briefly describe the ones we've seen most in the order of frequency; 1) yellow, Monarch type; 2) tiny almost neon blue; 3) medium sized, white; and 4) small burnt orange with a cluster of dark spots. If you know what these might be, I would love to know and hear about a good field guide for here.

Sandhill cranes, *Grus canadensis*, are here every day. I do not believe there is a nest below us, but a family member who was retrieving trash in the Refuge last week thinks there is one to the east of here and Campbell Creek, which is not far. They can be seen singly, and in groups up to 11 flying low near the base of the bluff and also circling above it. Their calls have gotten fewer than a few weeks ago. Last week also, two of us went down to look for frogs as one thought they might have been the desperate splashes that started up as he approached small ponds. Upon examination those proved to be a small fish (3-4 inches) that looked like Sticklebacks. They were slightly greenish on top had a dorsal fin and some were red/orange on the underside. Many were gasping as the ponds were drying in the hot sun. Do you know what they are? Many of the ponds have dried up with deep cracks in the mud and dead fish are lying about in small numbers. These look much smaller than the fish I saw the gulls eating earlier. We were in a hurry so did not stop long to look for more evidence of frogs. Has anyone seen signs of frogs down in the close fresh water segment below the bluff?

Rick Sinnott wrote on Tue, 5 Jun 2001 @ 16:30:

Definitely sticklebacks in those ponds.

Bears leave prints in soft dirt and mud, but a 120 pound bear doesn't leave much of a track in dirt. I was by your place this morning about 11 looking for the bear. I knocked but no one seemed to be home. Your neighbor, Nancy, called and we stopped at most of the houses along the bluff. I was prepared to dart the bear and take him home, but never saw it. I think it was your place that had the tulips planted on the west side? If so, it was probably the bear that walked through them (not me).

Don't know much about butterflies, but the yellow one is probably a swallowtail of some kind. If you can observe them sitting still, the swallowtails have colorful (blue/red) lobes on the trailing edge of the wings.

Tue, 05 Jun 2001 @ 7 PM: 13+ Sandhill cranes, *Grus canadensis*, flying silently in an eastward direction over the now dry deep-pond area: It looked as though they might have landed just east of here. The leafing out of trees is obscuring the clearer view we had in earlier spring. Their swooping circles and glides seemed choreographed as our whole family stood mesmerized watching. They changed directions and levels for reasons we could not understand, but it was graceful. Their numbers, the length of time we could see them and their utter silence made it seem unreal....

Wed, 6/6/2001 @ 7:15 AM: 17 Sandhill cranes flew in low from the west along the tideline. It is amazing how low and slowly those big birds can fly and still stay airborne. Having landed, some are preening and some are feeding. They are at just about the far extent of vegetation. Do not usually see them out that far.... 8:30 AM: The cranes have moved inward to the toe of the bluff where they can be heard at irregular intervals over the wind. God bless the rains!!! We smelled wood smoke last night for a short time and scanned the surrounds for any nearby signs. It must have been far away or very small--thank goodness! We've been hauling deadwood and watering trees one by one. We have been torn, knowing the fire danger and started doing more clearing last spring. The conflict is leaving natural habitat for the

diversity of critters. Still, this place is so untouched that it will take us years (It is not that big, we're just slow)....

6/7/2001 @ 7 AM: It is 48 degrees and the wind is out of the south @ 7. Could hear Sandhill cranes calling just below here shortly to the east. They are so close in to the bluff that we cannot see them.

The bears did not get into the garbage. We wondered how early we dared put it out for the truck, which came once before 6 AM here. A sparrow sings loud and often with the most persuasive tone. A son's biologist friend who just graduated from Williams will be visiting soon and may solve my query. Which sparrow is it? When he was little his parents matched him up with an avid ornithologist to keep his active mind busy. He is very good at identification and we have always loved to have him along on hikes and camping trips. 10 PM: There was a yearling moose here tonight sampling just about everything. I think I am getting quite a few perennials and shrubs that they truly do not care for as they just sniff them and move on. Got down on his knees, though, to snarf the new grass--yum! Cutest thing: He was fascinated with the plastic stakes with blue reflectors with which I marked the drive. He would butt it and mouth it and bit one of the reflectors clean off and sucked on it for awhile. After he dropped it he was searching the woodpile for it for about a minute before moving on to the next stake. I'm just glad he didn't eat one. Don't think it would digest very well. He seems skinny to me. Ate around here all morning and then was back tonight.

Wed, 6/13/2001 @ 6 PM: I know it this is life, but still it is sad. I was trying to focus in a flock of about 12 Sandhill cranes, *Grus canadensis*, flying eastward low like they were thinking about landing, when a blur caught my eye. It was a coyote trotting out from the bluff. A neighbor told me day before yesterday that she had been hearing the coyotes lately and thought they might be holed up here somewhere close. I was hoping not because we think there is a Sandhill nest nearby. If there is they probably don't have a prayer. Well, it is not a fat coyote, *Canis latrans incolatus*. It looked like it still could eat quite a lot before it feels ennui at the smell and sound of birds. It moved out towards the ocean and slightly eastward, then when I turned to put something down and refocused it had disappeared, probably down one of the little inlet [tidal guts]....

Rick Sinnott wrote on Fri, 15 Jun 2001 @ 11:03:

I looked for the crane nest about 2 weeks ago. No luck, although an adult was exhibiting "sneaky" behavior near the base of the bluff, which usually means there is a nest within a couple of hundred yards....

....Your bear spent a little time in your neighborhood last week. Today I'm getting calls from near the Klatt ballfields, so it sounds like your bear has moved east a few miles.

Fri, 15 Jun 2001 @ 12:53: Thanks. This area on the edge of the ACWR is truly one of the last best places in Anchorage of biodiversity for animals and plants with these particular codependent habitats. I want to know that the critters have a large area of space they can be relatively undisturbed, so learning about the recent presence of even a black bear thrills me. We are reluctantly clearing some deadwood out because of the fire hazard, but doing a lot of hopeful forest watering. More interesting natural greenery and wildflowers are the reward, those things having lain dormant during the dryer periods.

I did not know until very recently that there are shelled snails in the marsh and in our gardens. I do not know if they are the same kind on the grass in ponds and on dry land up here--they look similar. Can you tell me what they might be? Also, when we picked up refuse a few weeks ago, we were surprised to find many of those tiny white and pink clam shells, *Macoma balthica*, just below here. We had thought they were over by Kincaid, but not in this area....

Smiley Shields wrote on Mon, 18 Jun 2001 @ 10:25:

The Macoma clams are ubiquitous in this area. I am convinced that they probably have the greatest bio-mass of any local critter. In many places their population density is at least 1/cm². By the way, the base color of the clam shells is white. Pinks and blacks, greys, etc., come from

the periostracum, a protein that covers the outside of the shell. when the clam dies this protein slowly decomposes and different colors are present, especially the pink.

There are many species of freshwater pond snails in the intertidal. These may be able to stand some salt in their water but not much. These critters have a elongated helix that ends in a point. I have yet to see real saltwater snail in this area. Are you finding snail shells in your garden or live snails? Cheers,

Mon, 18 Jun 2001 @ 10:50: Thanks for the information. How fascinating! They are the prettiest little things and so delicate. We first saw them when I taught on the Kenai Peninsula twenty-five years or so ago. The snails in the yard have been alive. The first one I found I thought could have been brought in by a plant we bought from Costco, a *Juniperus squamata* 'Blue Star', so just sort of forgot about it. Then the next day on the other side of the house I found several in my precious Unalaska violets, munching away. I just picked them off and put them on a log. I certainly never found these at either of our other previous Anchorage homes; one in Chester Valley; and one in College Gate; both of which place I spent countless hours grubbing in the dirt. If I find any more, I might give you a call Best,

Thu, 6/20/2001: A neighbor just west of here told me that a mink got their pet ducks this winter. They caught it inside their pen otherwise they wouldn't have known what had killed their pets. Just recently I thought we might have smelled a mink just below here towards Dimond or our lot, but didn't linger as the bugs were fierce that night.

6/23/2001 @ 8:37 AM: A neighbor just called to say they could see the belugas with binoculars. If you see them note the time, location, direction they are swimming and count them if you can. Give as much information as possible. If they head up Campbell Creek, try to see how far up they go and draw a sketch to give the Fish and Game biologists. I'm getting our sons up to help me watch. Thanks! 10:20 AM: Saw a small pod of belugas mostly to the east of Campbell Creek. Could not actually get a count--saw 4 at one time. Two were mature; two immature. They are still there, spouting. That must be a mile away & I think I can hear them spouting when the airplanes are not going overhead.

Bob Brock wrote @ 9:38 AM on the query of whether they could see them:

Negative. But, only a 5-knot wind blowing so they should be easily visible. Loads of deadheads in the Arm. Hot weather has put all the rivers in semi flood stage from snow melt. I saw Belugas off Little Sue when I flew in from Fairbanks a few days ago. Remember you only see 25% of the pod. Wind is picking up. If this is the first day you've seen them then the red run has just begun and should build quickly, so, good opportunities over the next week and especially with the high tides.

And at 10:10:

Got em Barbara. 4--- bearing 200' compass from west side Johns Park. I'll try and get a digital image.

10:30 AM: They are still there and now I can see about 11 at one time. They are spouting a lot. Almost seem to be playing. Maybe they are having a feeding frenzy. If they were closer I could see better. Hope Bob gets that digital image. It is way to far to show up on our old Olympus even through the scope.

10:42 PM: To any biologists, friends, and neighbors who were able to see the belugas today because of the e-mail, you can thank Dee.... If you let me know about a sighting--I will pass it on.

6/24/2001 @ 2:20 AM: Son just reported that a big bear ran past the basement window very close to the house. He first heard the thumping approach and as it quickly passed he heard the sound of "labored respiratory sounds." If the bear we saw last week was 145 lbs, he told me, this one had to have been 300 lbs. It was heading east on the bluff side of the house. He hiked the Wedge with friends today and saw not one bear.

6/25/2001 @ 6:20 AM: Awoke to 7 Sandhill cranes, *Grus canadensis*, calling loudly. Could have been alarm calls. There appear to be some fresh tracks of something large below here, but I cannot make out what they are. They seem to be feeding slightly to the east of here, but they look nervous.... 6:55 AM:

The cranes have moved a few hundred yards westward, but they can no longer be seen from here. They are vociferous this morning. Gulls line the shore and creek and swallows are darting about in the marsh. An American robin, *Turdus migratorius*, just swooped in and took the coniferous perch of a Song sparrow, *Melospiza melodia*. The sparrow gave it up quickly, moving to a lower branch and continuing to sing. No bear sightings, neither last night nor this morning so far. Yesterday, 6/24, @ 5:30 we saw two Yellow-bellied sapsuckers, *Sphyrapicus varius*, searching for food in our deadwood pile. One landed on a clean new wood driveway stake and began pecking at it.

6/26/2001 @ 10 PM: 3 Sandhill cranes, *Grus canadensis*, feeding in the deep pond area recently reflooded by the high tides. The temperature tonight is still 70 degrees and the bugs are thick....

6/27/2001 @ 11 PM: 5 Sandhill cranes, *Grus canadensis*, landed in the pond area recently reflooded with seawater calling loudly. Two flapped their wings in display. One jumped and pecked at something large it was eating. They walked around and fed for awhile, then took off and circled back landing near where they had been. They seemed to be following one in particular and everywhere that one went the rest followed rapidly. After marching through the grasses feeding they took off and flew in synchronistic movement back and forth until they landed almost out by the tideline, which is quite a ways out there. They seem to have settled into a spot they like as they are still eating there. I wonder if they are eating those little clams. The light is fading. Behind them I can see a large flock of seabirds silhouetted, but cannot make out what they are.... The temperature is 67 with the wind out of the north @ 9. It is raining lightly.

Bob Paulson wrote on Thu, 28 Jun 2001 @ 21:57:

A few days ago we had bear scat in our yard that was compatible with the size bear your son reported!

6/30/2001 @ 9:20 PM: Saw our first porcupine, *Erethizon dorsatum*, of the year--actually heard them a number of times. It was waddling through some goatsbeard and clover on the West Dimond bluff and I probably frightened it as I didn't realize it was there. It walked over the ridge and into the underbrush. It was a good size, probably a young adult. 12 AM: Heard a bunch of coyotes, *Canis latrans incolatus*, just west of here down in the marsh. Never heard so many. Sounded like there were young ones too. Did anyone see them and confirm a family with kits?

7/1/2001 @ 11 AM: Two Sandhill cranes, *Grus canadensis*, took off from just east of here soaring westward approx. 200 feet over the marsh. They circled and were calling. Several ravens, *Corvus corax*, could be heard cawing below. There are many baby chickadees in the conifers near the top of the bluff. They are probably, the Black-capped chickadee, *Parus atricapillus*. Our sons report that they saw two porcupines, *Erethizon dorsatum*, yesterday evening around 10 PM; one an adult, the other a young one following. They disappeared over the bluff down towards the marsh. A Song sparrow, *Melospiza melodia*, sings several times a day from the trees high on the bluff, especially in the evening. There are many songbirds that we have not yet learned to recognize.

Wednesday, 6/27/2001 @ 6:45 PM: I saw a Yellow warbler, *Dendroica petechia*, flitting about in some naturalized Mountain Ash on the bluff. It's bright yellow plumage was hard to miss and the sleek shape very distinctive. The American robins, *Turdus migratorius*, that made their nest above our front door near the beginning of June now have chicks that they are feeding. I found a dead grub that someone had tracked in to the entryway the other day.

7/9/2001 @ 10:40 PM: 7 Sandhill cranes, *Grus canadensis*, feeding about half-way to the east of here to Campbell Creek. They are out past the newly filled freshwater ponds. A Song sparrow chick sits and with a big-wide-open mouth sings in the conifer just below here on the bluff. I never saw anything quite so cute. Didn't know they could sing like that when they still had downy feathers....

7/10/2001 @ 8:07 AM: 3 Sandhill cranes coming in for a landing from the west. They soared in buffeted by the whitecap producing winds, then tumbled one after the other in an effort to get down closer to the freshwater ponds just east of here in which they landed, then disappeared behind the foliage of the bluff

trees. 8:20 AM: A moose cow and her calf apparently slept awhile in the yard at the edge of the woods. She led the baby around to show it places to browse. It sniffed the Unalaska violets, Jacob's ladder, and wandered off for some aspen and cottonwood shrubs. They keep them pretty well mowed down. We were awakened this morning earlier by ravens running on the roof and diving off to return calling loudly. Have no idea what they were doing--maybe just having a good time! I'll have to look to see if there is any sort of carcass up there.

7/12/2001 @ 12 PM: 3 Ravens, *Corvus corax*, squawking up a storm, flying and landing in the conifers high on the bluff. Don't know what the brouhaha is about. 1:05 PM: 10 Sandhill cranes, *Grus canadensis*, just east of here feeding widely between the bluff and the mudflats. A small group of 5 caught my eye as they flew in from the west and landed just below here a few minutes ago. They took off to join the others shortly, harassed by a gull. Some of them look smaller than the others, but they are so large they must be adults. What size would crane nestlings be here now and when do they fledge? Husband tells me the Northern harrier, *Circus cyaneus*, was sitting in a birch tree when he drove up yesterday around 6:30 PM.

Rick Sinnott wrote on Fri, 13 Jul 2001 @ 08:20:

Young cranes should be over half the height of the adults, but they shouldn't be able to fly yet.

7/12/2001 @ 10 PM: Northern goshawk, *Accipiter gentilis*, being dive-bombed by a gull: It sat for awhile, atop the same conifer ravens sometimes frequent just to the east and down a few yards, as the gull dove repeatedly. Before we could get the camera attached to the scope, it took off to the west and flew lower down on the bluff beating its wings rapidly.

7/13/2001 @ 7:30 AM: Saw a large raptor with rapid wingbeats and short soaring periods, but it was so far out I couldn't see it clearly and lost it soon. It was probably a Northern goshawk, maybe the same one we saw last night....

These "black bear sightings" from:

Rick Sinnott:

A 130 pound black bear with a red ear tag was reported near Klatt Elementary yesterday. It's a bear tagged on the Hillside that apparently likes to visit Kincaid Park on occasion. Second trip this year that I know about. Now appears heading back to Hillside.

And the Adams family:

Well, seems like everyone's been seeing bears in their yards but us. That was fine with me, but I guess the kids couldn't bear to be left out. Sure 'nuf, yesterday during the day ...a small blackie the kids called "a baby" was in the back yard about 4-5 feet on the other side of a piece of glass from them.

We don't have a weight estimate nor an ear tag report..., but as far as their 'baby' calibration goes, they were just at the Circus Boreal show, and saw 3 sizes of bears, including two cubs. So they have some idea of the relative size of bears.

The bear appeared from over the bluff and vanished whence it came. I looked for paw prints last night but could find none. No surprise given the small size of the critter.

Keep a clean camp, folks! :-) bc

7/15/2001: Neighbor Jude saw a yellow tagged black bear Sunday night.

7/17/2001 @ 2:45 PM: A small group of Sandhill cranes, *Grus canadensis*, can be heard to the east below us in the marsh. A family member read aloud yesterday evening from "The Sibley Guide to Birds"

first published in 2000 under the auspices of the National Audubon Society: "Juvenile until at least Apr (age 10 months) give high, squeaky or trilled tweer." Heard it for the first time this afternoon. Don't know if I never heard it before or if I just didn't know to listen for it. Very interesting book for user-friendly identification in case you have not seen it. It is by David Allen Sibley.

7/20/2001 @ 8:115 AM: Two Sandhill cranes, *Grus canadensis*, moved several times calling loudly. When I looked closer I could see that they were practically being shadowed by a coyote, *Canis latrans incolatus*. They moved back and forth from east to west and back again before I could no longer see them in the trees though the calls continue during the course of 40 minutes. During that time the coyote took about a 10 minute "nap" after which it stretched and yawned a few times then resumed the stalking. They might be trying to keep the coyote from the Sandhill calves. This coyote is not skinny.

The robins that nested here above our porch nearly succeeded in raising their brood to fledge. Unfortunately their constant attention to their chicks attracted the eye of one or more raptors and it became a live feeding station. The nest was first knocked down I think by a young Northern harrier, *Circus cyaneus*, which was seen sitting in a dead birch a few yards from the nest while the parents protested and tried to draw it away. They succeeded, as I stood in front of the nest. We put the nest back with a support shelf, and were going to place a blind up to shield it from passing raptors, but before we could get that far, the first or another returned and took the entire nest, chicks and all. As Rick Sinnott says, "Raptors have to eat too."

Later that afternoon while we were cleaning up the porch there were three bald eagles, *Haliaeetus leucocephalus*, hanging around in the trees on the north side of the house. Two were immature and the adult seemed to be coaching them in hunting. A pair of robins harassed them mercilessly and eventually chased the three off. We were in awe....

Dave Adams wrote on Fri, 20 Jul 2001 @ 10:15:

Wow. There sure is a lot going on out at your place! There is a wider marsh behind us, but there seems to be more cirama on your end.

Fri, 20 Jul 2001 @ 10:54: It could have to do with the 165' or so old forest on the bluff which is an integral part of the refuge in reality. It could also have to do with my extreme distractibility and willingness to be lure.J by just about any whim to watch like a raptor from its perch for long periods of time.... Like I mentioned before, to our chagrin we have found that if we are not looking, we miss whatever is there at that any given time--which would mean since we watch for relatively brief periods we miss most of what goes on out there. It boggles the mind. Yesterday, leaning into the wind that pelted us with stinging showers, I had the great pleasure of accompanying Smiley Shields and two scientists from Cornell to observe much smaller creatures. There is so much out there that we don't even know about....

Jeff Lowenfels wrote on Wed., Jul 2001:

No whales, but I did find a frog in one of my front gardens. I will see if it is around for a few more days and if it is, then I will call you can come and look at it!!!!!!

Wed, 25 Jul 2001 @ 14:59: That would be great! So much to learn!!! :-) Thanks...

7/31/2001 @ 2:30 PM: 13 Sandhill cranes circling high above the bluff, alternately calling and flying silently. We have seen a pair sleeping in the large pond down below us in the marsh the last few nights. We hear them calling all times of day and night, sometimes being stalked by a coyote (or more (that we do not see)). I saw them feed on fish several times the last few days, either sticklebacks or small ocean fish left by the high tides. Through the scope I can see their feathers, dropped as they preened, floating in the pond near them.

8/1/2001: ...Just after 11 PM I was awakened by the howling and yipping of first the sound of a family of coyotes with kits, then it sounded more like an entire pack with more than two adults. We awakened to the same around 7 this morning and I heard them again at 10 AM. No cranes in sight. This does not

sound good for the Sandhill crane population here. Has anyone been able to see this group of coyotes and know what the population is?

Bob Brock wrote on Wed, 01 Aug 2001 @ 10:54:

This is probably the mating pair that I sent you a photo of that has occupied the coast for the past 7 or 8 years. They appeared to have moved to near the peat pile last year. Prior to that they seemed to be stationed at the mouth of Campbell Creek. In the winter I always spot them, either running single or together generally out in the broken ice.

And my dogs go crazy when the coyotes start communicating with one another in the night... drives em WILD. Domesticated dogs get all stirred up by their wild cousins. I have had a brazen coyote within 50 yards of me on my back slope...absolutely fearless, but masters of cover--yipping back at my yells for them to leave. I'm quite sure they could kill my 80lbs GSP male, who is build like....well he looks like a pitbull with flop ears...in seconds. Coyotes know hamstrings and where the bleeders are (veins and arteries) ...domestic dogs don't.

These coyotes however roam deep into town and I have seen them crossing Minnesota drive many times. So, their range is not limited to the coast. And I suspect, but don't know, that cranes are not the easiest prey on the market. Those beaks are deadly.

I've also seen coyotes ... run the tideline looking for whatever washes up, plus, during hunting season they nail cripples.

Smiley Shields wrote on Wed, 01 Aug 2001 @ 17:02:

Not to worry about the cranes. They may be looking at the cranes and salivating like Pavlov's dog, but the voles in the sedges are what keeps them going.

8/4/2001@ 5 AM: Awoke to the yips and howls of coyotes below us here in the marsh. I could hear others answering the calls further west. We continue to hear coyotes several times daily as well as Sandhill cranes. One son recently commented that robins are not very quiet in the bushes. "Several times," he remarked, "I've thought it might be a bear." The robins have been feasting with gusto on the red berries of the Mountain Ash. While we walked near Jodphur tonight near 11 my husband and I wondered quietly if the branch snapping in the thickness of the darkening woods was a moose or bear. Neither of us asked the question until we were long down that lonesome, dark road.

8/7/2001 @ 10:15 PM: An hour ago the coyotes just west and below here were howling with the fire engines. Now there are two Sandhill cranes preening in the big pond. Ten minutes ago when I looked out they were fishing. Probably Sticklebacks since the tide has not washed over it that recently to stock it with anything more substantial. The migration is beginning. We are seeing more Canada geese and larger numbers of ducks and shorebirds.

8/19/2001 @ 9:18 PM: The coyotes woke us this morning with their yipping and howling just below and to the west of here. This is unusual to hear them several times a day--it would be unusual even to hear them daily. Sandhill cranes are still around although we do not see or hear as many as several weeks ago. Last night we saw our first vole. We've lived here two years now and there must be hundreds, maybe more on this lot alone, but they are very tiny. A friend in Seattle said they are the size of rats down there and eat a few bites out of each of their strawberries and love tulips. The one we saw appeared to be a spruce cone rolling down the drive around 10 PM when we were returning from a walk, but it started rolling erratically. Looking more closely we noticed tiny legs about the diameter of a toothpick. It was grey-brown, round and furry with a very long tail. At first we could not see much of a snout, but after watching it searching and eating for a few minutes we could see that it had one. I wanted to touch it to see if it was really as soft as it look, but of course it would have been frightened and maybe bitten me. Do they bite?

We have 4 large yellow-jacket nests within a hundred yards of each other; one on the high eaves and 3 in nearby trees. Should we be concerned about these numbers or is this pretty normal? I've never seen so many in one place. Maybe we are too quiet. [A few days later we found yet another for a total of 5.] The high tides are delightful. I hope anyone who can see, smell and hear them enjoys them half as much as myself. The ducks, geese and shorebirds are close in. They woke us this morning. It was such a surprise to have them so close. I found slugs and SNAILS devouring my Unalaska violets again. No wonder they haven't been spreading like I expected they would. Anyone seen any belugas? We have not. A moose or more than one have bitten off most of the blue reflectors in the drive. I was worried that they were ingesting them, but so far I have found all the round pieces they've bitten off, so I guess they just play with them. This winter I'll just use wood stakes and surveyors tape. I had visions of a moose dying with plastic shards in its intestines.

Rick Sinnott wrote on Mon, 20 Aug 2001 @ 08:31:

Voles bite, but not fatal. Don't know much about yellowjackets. Hope no one is allergic. No recent reports of belugas. The National Marine Fisheries Service has been catching them off Eagle River Flats. Never heard of moose eating reflectors. Very odd.

Smiley Shields wrote on Tue, 21 Aug 2001 @ 11:11 AM:

What you saw last night was for sure not a vole. In the first place voles have very short tails, only about as long as one of their legs. What you saw was a shrew. These are in fact very tiny and quite common but very secretive. They sure don't need much volume in which to hide!

Also your friend in Seattle is quite mistaken about what she has in her garden. If they are the size of rats and eat her strawberries then they almost certainly rats! No shrew in the world is as large as a rat, and for sure none that live in Seattle. More importantly, shrews are absolutely carnivorous, every last one of them. They are often blamed for garden damage around here but that is false. That damage is caused almost entirely by voles. Shrews would starve to death in a few hours if they were ever so silly as to try to eat plants. They greatly enjoy high protein dog and cat food when they can get it, however.

*Look for little runways in the grasses around your place and down in the sedges. That is where the voles are. Shrews have very long snouts and their front teeth are angled sharply out so they can get insects in cracks. They do bite but they are so small they rarely break the skin.
Shrew and vole lover,*

Tue, 21 Aug 2001 @ 11:16: Thanks for the comments. Hope you are having a great rest of the summer. I was very perplexed at the identity of this little critter--even more after reading the various descriptions. It was a little dark, so we couldn't see exactly what it was eating, but it appeared to be just about everything! Here are two of the links I read from fish and game. A long-tailed vole is mentioned, actually.

<http://www.state.ak.us/local/akpages/FISH.GAME/notebook/smqgame/voles.htm>

<http://www.state.ak.us/local/akpages/FISH.GAME/notebook/smqgame/shrews.htm> Seeing it was a distinct thrill! Got to be quieter, stiller, and wait longer to see some things. Can't just wait for them to catch one's eye. Would love to do more field trips with you in the future.... Life-long learner...as in Eagle fluff,

8/22/2001 @ 6 PM: A beautiful, juvenile Rough-legged Hawk, *Buteo lagopus*, seen sitting in a dead spruce tree midway down the bluff from here. It preened for about 15 minutes, then swooped off to the east below the trees over the marsh.

Smiley Shields wrote on Thu, 23 Aug 2001 @ 09:35:

I have also been seeing some hawks lately, but I have not been able to identify them because I just see flashes of them between the trees...

The longtailed vole---Microtus longicaudus---has its range to the east of here and I don't know if any have ever been found in this area (for some reason could not get your vole citation to come up). In any case, the name is somewhat of a misnomer. It would be very difficult, if not impossible, to ID a longtail vole unless you had several specimens to compare with meadow voles or California voles, especially where these species overlap. Because size and other phenotypic traits vary so much within vole species, e.g., adult male California voles can vary from 30 to 110 g, depending upon location and time of year, and because several different species are so very similar, vole identification can be very difficult, indeed....

Thu, 23 Aug 2001 @ 10:10: It is always nice to have someone else to view things with--there seems to be a double pleasure. A son and I took turns at the scope with the Rough-legged hawk id. He is quicker to decide what matches.... Perhaps his vision is just so much better than mine that it is easy for him. It was odd how I noticed the hawk because I don't usually look down towards that one mostly obscured dead spruce. To get a look I had to nearly hang off the tiny 3rd floor deck with the scope. It cooperated by staying put awhile and the sunlight on its feathers was sublime. What beauty! Most times when I see things I do not have a chance to get that good a look, so it is always a thrill when I do. I shall be a vole/shrew watcher forever now, I'm sure....

8/27/2001 @ 8 PM: A mature Northern harrier, *Circus cyaneus*, flew swiftly through the trees on the west side of here and eastward, down through the trees of the bluff slope. It is truly amazing to see the speed at which they can fly without hitting trees adept as they are in that habitat.... 6:15 PM: Has anyone sighted a Golden eagle, *Aquila chrysaetos*, in the area recently? I would have to see it again to be sure and shall be watching. It could have been a juvenile Bald eagle, *Haliaeetus leucocephalus*, although it appeared more like the former. It flew in swiftly from the east and circled twice at the ridge of the bluff, then swooped sharply into the vegetated area near the base of the bluff, disappearing from sight. (I heard no sound.)

9/1/2001 @ 9:30 AM: Sandhill cranes, *Grus canadensis*, have been appearing at increasing intervals. All summer we have seen groups of 2, 3, 6, and 7 often. The last few days we see more of them fairly close together, but still separate. They feed voraciously and occasionally are seen preening or resting. They will be leaving before long.

Rick Sinnott wrote on Tue, 4 Sep 2001 @ 10:17:

Fall is time for the cohos to run. They are in Bird Creek, so I'll bet they are also gathering at Campbell Creek.

9/4/2001 @ 12 PM: 19 Sandhill cranes, *Grus canadensis*, are hunkered down in the winds and are feeding voraciously in the tall grass between the ponded areas and the base of the bluff. There could well be more, but these are the ones I can see that are not obscured by the foliage. 12:30 PM: A flock of 15+ White-fronted geese, *Anser albifrons*, flew in from the west and are alternately preening, feeding and resting just past the ponded area. I thought I had seen them the last few days, but this was the first good look I've gotten to be sure of their identification. The group of 19 Sandhill cranes is still feeding below here. I can see almost 19 through various foliage windows when the wind blows just right. They are likely the same 19 seen earlier. 6:15 PM: 5 Sandhill cranes feeding close in to bluff. I never saw such wet looking cranes!

9/5/2001 @ 8 AM: 15 Sandhill cranes, *Grus canadensis*, flew in low from the east and landed between the ponded area and the base of the bluff. They immediately began feeding. Two in the group seemed somewhat aggressive, keeping others away by attacking them with their beaks. One had feathers on the top of its head that stood up like a crown, like one I saw last fall....The temperature according to the Internet is 48 degrees and the wind is out of the south at 13. I think in actuality the velocity is at least 20 mph here. 10:10 AM: 11 Sandhill cranes landed in pond area, marched almost in a line through the pond and began towards the bluff in the same manner, hunting for food. As they began to find things to eat they dispersed the line and fed moving westward still staying grouped. They are now very nearly obscured by the foliage except when the wind gusts blow hard enough to reveal them. The light is great. It is enticing. There was probably just as much activity yesterday, but because of the overcast darkness

the wildlife was much harder to see. And, as I remind myself and others, these creatures are present when we are not looking, we just see a fraction of what is there!

9/11/2001 @ 8:15 PM: 3 coyotes, *Canis latrans incolatus*, seen just below us in the marsh. This is, I believe, the first time I have ever seen 3 here. Could just these three been making the frequent and resonant vocalizations we have been hearing? Quite possibly. One was clearly a kit; one adult smaller and slighter than the other, probably the female; and their leader, a large, extremely well fed and muscular looking male. 8:37 PM: Approximately 40 Sandhill cranes, *Grus canadensis*, came in noisily from the east above the bluff. They flew over the trees and down the bluff slightly in elevation, then continued westward. Is this a good-bye? I'm not quite ready.

Rick Sinnott wrote on Wed, 12 Sep 2001 @ 10:44:

Check the Fish and Game crane website. Some of the cranes have already left Cook Inlet and are in the Yakutat area. The two young cranes we radioed this summer in the Anchorage refuge were across Turnagain Arm at Chickaloon Flats a few days ago. They move fast when they decide to head south.

Thanks. At 8:50 AM this morning, 9/12/2001, I could hear Sandhill cranes down below, but they were so close in to the vegetation that I could not see them at all and could not make out how many.

9/14/2001 @ 7:30 PM: Although we thought we might have already seen our last Sandhill cranes for the year tonight we saw 6 more. They flew in from the west above the bluff and tumbled like confetti in play or efforts to descend as they flew eastward below the bluff....

9/15/2001 @ 9:30 AM: 11 Sandhill cranes were seen resting and preening in the large pond area. After a short time they began moving inland feeding in the various vegetation. Some of them were almost in a line and the rest remained pretty tightly grouped as they fed. Present in the tight group is one with feathers on the top of its head that stand up rather like a crown. I wonder if it gets picked on or if this is an aberration? I have tried to get photos of it, but so far none of them have been good enough to see what I'm talking about. The day dawned partly cloudy. The temperature is 47 degrees and the wind is out of the east at 3....

9/17/2001 @ 11:30 AM: Heard Sandhill cranes; two groups flying east; and one west. I did not see the group headed west as they were flying very low and close in to the bluff. Likewise with the first group flying eastward, which I might have seen if I had gotten to the scope more quickly. I saw a small threesome apparently following the eastward group. They were further out in the marsh flying over the large pond area.... 7:14 PM: 12 Sandhill cranes came in from the west flying low. Looks like they may have landed down near Campbell Creek. 8:00 PM: 15 Sandhill cranes took off from just below here in close to the bluff towards the east. They were absolutely silent. I hear some more making sounds that sound almost like a purr below here to the west, but I've been watching and listening to determine whether they are taking off or not and they seem to be staying put. The temperature is 58 degrees and the wind is out of the south at 7. The afterglow of the sun is north.

9/18/2001: Saw several small groups of Sandhill cranes come through and stop below here. I tried to get some photographs, but am not sure if they will turn out because they were so very close in they were practically obscured by the trees. Every once in awhile their calls would lure me to watch again.

9/20/2001: Have not seen nor have I heard cranes yesterday or today so far. Perhaps they have gone. Keep watching and let me know if you see anymore this fall in the marsh.

Rick Sinnott wrote on 9/20/2001:

I think you may be right, Barbara. The two colts that we captured and tagged in the Anchorage Coastal Refuge were near Cordova and Gustavus on September 12. See the crane migration website to follow them to their winter home in California.
http://www.state.ak.us/local/akpages/FISH_GAME/wildlife/duck/crane/crane.htm

9/21/2001 @ 7:38 AM: At least 3 Sandhill cranes apparently spent the night here in the Refuge, and just took off towards the west calling as they went. They came from just below here to the east close in and flew out past the ponded area as they rose. The temperature is 44 degrees and there is just a slight breeze at this hour. The smell of jet exhaust fills my office as I type with an open window so that I can hear the sounds of Sandhills if they are still around. Soon there may be swans coming through. Has anyone seen any in the Refuge yet? To those who rise early enough--the sky was ablaze at 6 AM with many constellations clearly visible even with the coming dawn.

9/22/2001 @ 8:07 PM: 4 Sandhill cranes flew in from the west just above bluff level. It appears as though they were descending to land to the east of here near Campbell Creek.

9/25/2001 @ 2:35 PM: This is one I hoped I'd never see, but anticipated here. There is a beached adult beluga on the west bank of the Campbell Creek mouth as you face out. I have called the National Marine Fishery Service and am waiting for a return call. I can not tell from here if it is alive, but I see blood the length of the body. 2:55 PM: It is close to high tide now and I don't think the tide is going to get high enough to float the beached whale without help. There is a pod of belugas in the creek going back and forth by the beached whale. There are both white (adults) and grey (immature). 3:25 PM: Apparently the National Marine Fisheries Service already was out there after a report yesterday and took samples to try to determine as much as they can about the large male and what happened to it. So, it is dead, Jim--no more hoping or worrying about help or the tide. It died somewhere else and floated in. I'll try to stop feeling so sad about it now. There are still belugas milling around near where it landed. I'm hoping they are feeding and not in mourning. Who knows.... If you have a clue, enlighten me.

9/30/2001 @ 11:16 AM: Gulls are all over the beached beluga this morning. Perhaps the tide moved it to a position where they were able to get hold of sustenance. Has anyone seen any other scavengers at the whale? I would have expected the coyotes and eagles there, but have not seen them yet. I know they are around--last heard coyotes about 3 AM.

Smiley Shields wrote on Sun, 30 Sep 2001 @ 19:29:

Since I have lived here on the bluff I have found 5 dead belugas (in 15 years). A couple of them I have visited many times when I was on the mudflats. I have been amazed at the small amount of scavenging that I have seen. The one that visited the most had only two small bites out of it after lying in the same place all summer. However, there were several sets of tracks to these critters that I presume were coyotes.

On a related note, I found two baby belugas (48 and 52 inches long---one still had the umbilical cord attached). After awhile both of these were writhing piles of thousands of maggots. I would have presumed that at least the maggots would have been food for gulls, ravens, etc. I watched dozens of these birds fly only a few yards over the dead belugas. Not one of them made any attempt to predate the maggots. Lots of questions come to mind!

Sun, 30 Sep 2001 @ 19:39: How interesting! It seems so curious to me. Personally, I love to eat all kinds of whale that I have tried, but of course, we do not know what killed this one so I haven't been down to take some hunks myself. My village has not hunted whales for decades, maybe a century. When I was a girl we watched a pod of Orcas chase in what was, I believe, a Grey whale. It had been separated from the others and was a healthy appearing adult. It had virtually rammed itself up on the beach in its desperation to get away from the Killer whales, so even after they left the village could not refloat the creature. So, we put it out of its misery and ate it, thankfully. No one went hungry for quite awhile. I'm sure the maggots will make good use of it, but it was just seeming like a large waste. The gulls were all over it again this afternoon.....

Bob Brock wrote on Mon, 01 Oct 2001 @ 4:19:

Nocturnal feedings especially with a full moon are happening as you sleep. Typically, a hole is cut allowing access into the cavity of the whale and ravens, magpies and rodents will enter and

feed now and all winter picking little bits of fat and flesh from the inside-out protected from the chill blast of wind out of the arm. The whale will be buried in drifts but there will be a little stinks to high heaven doorway decorated by a trail of bloody flotsam well trod over by divers tracks that will provide sustenance for our non-auto driving neighbors all winter long...It smells to bejeezus in this store and the lighting is none to good, but there be no bar code, dress code or other jumped up class distinctions and postures. Just straight ahead toothy confrontations with others who shamelessly steal stock from the shelves and leave without paying...and give two hoots about the gnp....Cheers

Sun, 30 Sep 2001 @ 21:14: Your tales remind me of one of our *ungiikan*, stories from a time so long ago that things were very different from the way they are today. It is the story about Song Sparrow and his Cousin Wen. It had to do with going inside a whale and one actually eating so much he could not get out. Gluttony was the story. To read it in English see AK Geographic: Volume 23, Number 2....

Mon, 01 Oct 2001 @ 09:21 PM: Gentle souls may wish to avoid these scavenger discussions. (Simply click 'delete'.) Others of us are sometimes insatiably curious about nature and her work. Rick said he has seen some ravens on and about the dead beluga. bc

Smiley Shields wrote on Tue, 02 Oct 2001 @ 10:29:

From what I have seen of the beached whales and what I have learned talking to others, it seems that the maggots are extremely unpalatable. Also, perhaps the flesh changes quality as it decays. It would be interesting to see if given your connections you could glean information as to the consumption of "old" meat... Cheers,

Tue, 02 Oct 2001 @ 10:44: When my grandma taught us to do dryfish she did not have us put it in the screened fish house and no one said a word about it. She had us then, go out and pick maggots off of the fish daily. :(Then we had to figure out how to keep the cats, which we kept to keep away the rats, off of it. Never have tried maggots myself. Lots of gulls out there. An occasional raven, but mostly the gulls seem to be having at the beluga. It's a big one too. Unless the tide washes it out, it will be there a good long while....

10/3/2001 @ 7 PM: Something definitely spooked the Snow geese, *Chen caerulescens*, although I cannot see what it was. There were several flocks moving towards the bluff feeding and one by one they took off in apparent confusion, then headed out over the Turnagain Arm. When they all took off I could see that there were well over 300. Talked with neighbor, Natalie, who's husband said that, indeed, Snow geese come through here in the fall. When they took off their black wing tip markings were clearly visible. 7:25 PM: About 200 Snow geese mid-way out in marsh this side of Campbell Creek, moving inland as they feed. They are next to a larger flock of Canada geese.

Brad Smith of NOAA Fisheries wrote on Thu, 04 Oct 2001 @ 11:10:

We have a report of a beluga carcass across the inlet, and are wondering if this is the same animal, please call me and let me know if the whale is still visible at Campbell Cr. mouth. Thanks.

Thu, 04 Oct 2001 @ 11:11: Carcass still there with gulls scavenging--just an occasional raven. It is a big, heavy carcass and I think it won't go floating anywhere unless there is a good current with the higher tides coming. Have you discovered why this one died? I am curious about the new report, now also.

Brad Smith wrote on Thu, 04 Oct 2001 @ 13:20:

Thanks for the info. No, we will probably not know what killed the beluga at Campbell mouth. Most likely due to a stranding. Stranding is not an uncommon behavior for belugas, although we wonder if some aren't caused by foraging by killer whales. And later in response to a query: ...tissue analysis reveals the sex on the animal and genetic info helps us understand the biology

of this population; are there sub-groups in particular areas, do the Cook Inlet whales interbreed with Bristol Bay belugas?

10/5/2001 @ 7:55 AM: Perigrin falcon, *Falco peregrinus*, flew by westward 20 feet above bluff level. Its shape was clearly defined in the growing light. 9 AM: The beluga carcass is harder and harder to see. It appears to have been moved by the tides a bit and may be partially down in a rivulet. Mostly gulls are scavenging. I did see a young eagle standing on the flats near where it was covered with water for awhile. 11:34 AM: Just over 100 Snow geese, *Chen caerulescens*, are feeding in the marsh. One has a reddish band collar around its neck, but I cannot make out the number. I'll keep trying. A small number of the geese are juvenile grays.

10/7/2001 @ 9 AM: Approx. 240 Snow geese, *Chen caerulescens*, flew in noisily from the east and are feeding, preening, and resting on the flats. The temperature is a cool, damp 39 degrees and the wind is out the south at 3....

11/10/2001 @ 3 PM: Been seeing coyotes, *Canis latrans incolatus*, regularly and hearing them at night. Day before yesterday at 2:15 PM I saw the most I have ever seen at one time together in the Refuge, four. This does not seem to match the image suggested by the multi-toned choruses we heard during the summer, but perhaps as the Fish and Game Notebook Series site suggests, a few can sound like many.

The coyote may be the most vocal of the canids and is sometimes referred to as the "song dog." The most common call is a long, mournful high-pitched howl which ends in a series of sharp yips and yaps. The howl of the coyote has a somewhat ventriloquistic effect, and it has often been reported that the howling of two or three coyotes sounds like a dozen or more animals are involved."

http://www.state.ak.us/local/nkpages/FISH_GAME/notebook/furbear/coyote.htm

The four stood on the same log looking at one another for a short time and appeared to be listening to a far-off sound unheard by myself. They then took off westward on different paths. There are many animal tracks on, in and below the bluff. The snow provides a fascinating and changing slate to study....

11/16/2001 @ 9:40 AM: Yesterday around 1 PM I saw a lone coyote, *Canis latrans incolatus*, grace the base of the bluff below here. It was a gorgeous creature with a full multi-colored coat. The guard hairs around its collar and tail stood out in sharp relief through the lens of my scope. Its yellow eyes darted quizzically at the magpies that were hanging around the places it investigated. It was well fed and moved much more slowly than I have noticed of coyotes except when they had been napping. I wondered if perhaps it had just gotten up from a nap. The light was so good that I wanted to watch longer, but had to be somewhere....

2002:

Thursday, February 7, 2002 @ 1:55 PM: A small flock of Bohemian Waxwings, *Bombycilla garrulus*, graced our mid-height underbrush to feed. This morning a few were sitting in the weathered aspen on the bluff....Also present today are frequent Hoary Redpolls, *Carduelis hornemanni*, Common Redpolls, *Carduelis flammea*, and the raucous Black-billed Magpie, *Pica pica*....

Monday, 3/4/2002 @ 9:36 AM: "Coyote hearings" because we hear them usually more often than we see them in the winter when it is dark so long. Now that the light is returning we shall be seeing them more. Yesterday while skiing at Kincaid around 6:15 PM I heard the closest coyote howling I've heard. Since we live 165+ feet above the Refuge and I've seen them and heard them at that distance, say 50 yards out, they must have been in the woods a few yards from the Sisson Trail. I stopped and watched for awhile, but couldn't see them. When I asked a passing skier if she had seen them, she was incredulous that I thought they were coyotes. She assumed they were dogs and had seen nothing. I wondered if they had been disturbed by the throngs of people coming through earlier during the Tour of Anchorage. Some coyotes are habituated to people, but I don't think that most of those in the Refuge are comfortable with close proximity to humans.

Thanks to everyone who got back to me with responses to my coyote queries during February. What I have learned is this: Shortly after the post when I asked if anyone had seen or heard any signs of coyotes in the ACWR lately (because we had not) several folks from the area near the Klatt peat pile reported that they had, indeed, seen and heard coyotes in the last few nights. The next night, on 2-19-2002, we heard them singing just below us on West Dimond, loud and clear. We were worried that the person who had set traps and caught the lynx might have been catching coyotes and decimated the local group.

Rick Sinnott wrote,

"I didn't see as many tracks as usual when I walked from Point Campbell to the motocross area late last week. It's possible that our renegade trapper caught several of them. Coyotes will be mating in the next week or two, and I think they will be fussing with the den about now, so that may explain a different movement pattern too."

and

"We have no plans to control predators of any kind in the Anchorage area. Coyotes were first reported in southcentral Alaska in the 1920s or 1930s. I think they've been in Anchorage since then, although never in high numbers. The refuge is a great place for them because it let's them move though and den in natural areas, but has areas nearby with human sources of food. I do think they hammer young cranes in the refuge, but that's the way Mother Nature works."

Smiley Shields, who loves coyotes, explained to me that as for trying to figure out why coyotes or any other creatures have moved here one has to figure that many things that happen in nature are due to chance. What we can observe in even a 100 years is but a blip in time. So, while we should do what we can to be aware of patterns and do our best to serve as stewards of available habitat areas, sometimes we will not be able to understand what is happening or why. They eat lots of voles and shrews, so if there are plenty, they should be thriving. The bluff area provides good cover for denning with varied food supply as well as water. What could be finer?!

We saw many coyote paths reappear after recent snows, only to be erased by blowing snow in subsequent days. They are still with us.

bc

draft

Michael P. Carlson
6050 W. Dimond Blvd.
Anchorage, AK 99502

Jim Childers, PE
ADOT&PF Project Manager
c/o HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, Alaska 99503

Re: South Extension of the Coastal Trail
Draft Environmental Impact Statement and Corps of Engineers Fill Permit Reference # Y-1984-0121

March 1, 2003

Dear Mr. Childers:

I strongly disagree with the conclusions of the DEIS. Of the routes presented the yellow is the only viable, reasonable and cost effective option, however the political control exercised by the Knowles Administration over the process to date has not allowed for a full exploration of truly reasonable alternatives. Therefore I believe the current process should be stopped, new project management and consultants brought on board and the process restarted with a truly objective and open orientation.

My concerns are many but my time is very limited so I will focus on the most serious shortcomings of the Orange Modified Route in the DEIS:

- Political strong-arming did not allow for development of reasonable options
- The cost estimates understate the real project costs dramatically.
- Proposed trail construction, especially between Kincaid and Campbell Creek, will destabilize the bluff
- Wildlife in the refuge will be irreparably harmed.
- It is a shortsighted solution for Anchorage.

I have tried to keep my comments as brief and concise as possible, but given the length and complexity of the DEIS it will take many pages. For your convenience I have numbered each comment consecutively. The total number of comments is 31.

Political Strong-arming

1. It has been no secret right from the start that then Governor Knowles wanted this trail built along the coastline. He has stated such in many Anchorage Daily News (ADN) articles. His actions through direction to ADOT/PF have consistently undermined the objectivity of the EIS process that is contrary to the spirit and regulations that control the process.
2. Cooperating agencies, specifically Alaska Department of Fish and Game (ADFG) and US Fish & Wildlife Services (USFWS) were excluded from the critical early stages of the process because they did not share Knowles vision of a trail through the Anchorage Coastal Wildlife Refuge (ACWR).
3. ADFG and USFWS comments have been systematically ignored and marginalized in the process for the same reason.
4. MOA was removed as lead agency from the process when they showed little interest in pursuing Knowles agenda. ADOT, an agency that reports directly to Knowles was put in charge.
5. Within a week of the project team announcing the finding that the orange & gold routes were not reasonable and viable Spring 2002, Knowles directed ADOT to reinstate the orange route. This was even before receiving any of the petitions requesting him to do so.

6. Since its reinstatement in Spring 2002 thousands of man-hours have been spent by ADOT and the consultant team in developing the orange modified route, changing its alignment and construction dramatically. During that same period of time virtually no effort has been spent refining the other routes. If as much time had been spent improving the other routes we would undoubtedly have vastly superior alternatives to compare the orange modified too. Clearly ADOT/Knowles had no interest in improving the yellow, green, red and fuschia routes – they had already made up their mind which route was going to be recommended. How can this kind of process be portrayed as an objective, honest assessment of alternatives? It can't and shouldn't be.

Incomplete Cost Estimates

7. Costs are underestimated by a substantial amount because some very common and well established project costs have been omitted; design costs, DOT management costs, phasing costs, escalation, wetlands mitigation costs, design/project contingency and construction contingency.
8. Design costs for such a complex project will be considerable. After route selection a long and costly detailed design phase will be required which could easily add 10%-15% to the project.
9. ADOT will charge a fee to manage the construction, probably between 5% & 10% of the construction value. This will cover their staff costs for the duration of the project. These costs appear to be missing from the DEIS estimates.
10. Current funding sources only provide about \$6 million per year. At that rate it will take at least 7 years to construct a \$37 million trail. The project will be designed and bid in phases and each season the project may have a new contractor. With the specialized construction techniques and equipment described in the DEIS there will be a new learning curve each season increasing project costs dramatically. Overhead and profit margins will be higher for multiple small jobs and contractors risk will be greater. All this translates to increased costs that are hard to predict with accuracy but must be accounted for in the published budget if the public is to be well informed. A contingency of 10%-20% would not be unreasonable for this type of phasing program.
11. Prices for materials, equipment and labor increase over time, they always have and they always will (barring a depression). Currently construction costs are rising at 2%-3% per year, a fairly low rate. Even at that low rate over with a 2 year design period and 7 year construction period it will result in substantial construction cost increases that have not been factored into the published \$37 million price tag.
12. In order to fill the wetlands proposed by the DEIS additional wetlands will need to be purchased and or created. This is common practice dictated by Federal requirements. I assume this project will not be able to sidestep that requirement. Cost for acquiring land and/or creating wetlands are not in the current estimates. These costs could easily range from \$1-\$5 million.
13. Design/Project Contingency is needed because as detailed design develops most projects encounter unforeseen circumstances that often require more work or more expensive work than was originally anticipated. It is a very rare project indeed whose actual bid costs are less than concept estimates. With the uniqueness and complexity of the Orange Modified route it is a virtual certainty that the current estimated do not cover the scope of the final design. It is simply good practice to plan for these eventualities by including a design/project contingency of 10%-20%.
14. Construction Contingency is needed because when actual construction starts there will be changes caused by unforeseen conditions, design errors, changes in program and/or other forces. There will be change orders that will increase the costs over bid amounts, that is true on virtually every ADOT project. Once again the more complex, fragmented and unique the design the higher the risk associated with change orders. A minimum of 10% of the base construction costs should be allocated to Construction Contingency while 20% may be more realistic due to the complexities of this multi-phased project.
15. The chart below represents a more accurate assessment of actual project costs for the Orange Modified route. As you can see by my calculations the actual project costs could easily exceed \$58 million. Although my analysis is crude it illustrates that a large portion of the potential costs of this project is being concealed from the public in the DEIS. The public needs to know what the actual total project costs might be, not the incomplete information presented in the DEIS.

Orange Modified Costs

	Low Range	High Range
DEIS Estimate	37,000,000	37,000,000

Missing Costs		
Design Costs	3,700,000	5,550,000
ADOT Management	1,850,000	3,700,000
Construction Phasing	3,700,000	7,400,000
Cost Escalation	3,700,000	7,400,000
Wetlands Mitigation	1,000,000	5,000,000
Design Contingency	3,700,000	7,400,000
Construction Contingency	3,700,000	7,400,000
Total Project Costs	58,350,000	80,850,000

Bluff Destabilization

16. The proposed routing of the Orange Modified south of the Motocross puts the trail and the integrity of the bluff and the homes that sit atop it in danger. The 1983 Coastal Trail Study by Kramer Chin & Mayo concluded that constructing the trail down the face of this steep, unstable bluff was not feasible. The following is a quote from that report. ...The major consideration in routing the trail along Dimond Boulevard was the inability to find an acceptable route within Kincaid Park that would have provided for access to the beach from the high, unstable slopes above. A further consideration was the residents' expressed need for a trail along West Dimond Boulevard that allowed safe access to Kincaid Park.... The trail must go along Dimond Blvd. Rather than along the coast because:....Where the trail exits Kincaid Park the bluff is too steep, and because of the unstable soil condition, it is not possible to construct the trail across the slope.....As in section 6, one of the difficulties in returning the trail to the coast from West Dimond Boulevard is the hazard of building the trail on highly unstable soil conditions resulting in potential undercutting of the existing slopes..... Point Campbell to Sand Lake Road [p 114]. This section is characterized by a 200 to 250 foot bluff and soils consisting mainly of gravel and sand. The topography is rolling to steep, however, no serious geotechnical problems are anticipated relative to the selected route. Soils below a thin mantle of organics and topsoil are non-frost-susceptible. The face of the bluffs are unstable and should be avoided. The Orange Modified's choice rests entirely on a brief report prepared by Shannon & Wilson which states that it is possible to engineer, however in personal conversations with the author it became clear to me that he did not consider it a reasonable or cost effective solution.
17. The first part of the trail from the Motocross cuts with retaining wall into an extremely steep hillside, steeper in actuality than the minimums established by good practice noted in the report. On a slope this steep there is no effective way to control drainage, especially when the ground is frozen. You can expect constant problems associated with erosion and icing in this area.
18. When the trail descends half way down the bluff around High Tide Park, it gets a lot worse. At that point vegetation on the entire lower half of the bluff is destroyed and fill is added to support the trail. This is more than a 100' swath of clear-cutting of old growth forests. This forest plays a critical role in stabilizing the bluff, first protecting the soil from the pounding, wind-driven rains and more importantly holding the surface of the soil together. The following photographs were taken in the area around High Tide Park and clearly show past ground sloughing and the role the root systems of the forest play in maintaining it's stability. Nothing that can be planted on the newly created slopes can come close to the effectiveness of the existing forest and as you can see that even with the current protection the ground has moved substantially. The new slopes created by the trail construction will be subject to constant erosion that will be difficult, environmentally damaging and costly to repair. The DEIS offers no substantive solutions to how they will protect these slopes from erosion forces.
19. As noted in the DEIS a large portion of the Orange Modified is placed in high seismic hazard zones, including the section from the Motocross to Campbell Creek. These areas show signs of significant movement in recent earthquakes as seen in these photographs. While the DEIS recognizes the issue, like so many other issues, they sidestep it. What will happen to people using the trail during an earthquake that provokes ground movement? They could easily be buried under the weight of the upper bluff coming down. What will happen to the homes perched on the bluff above? Won't the clear cutting of the bluff and the subsequent erosion make the potential slides larger and more severe? It seems logical they would – the DEIS should speak directly to this issue.

20. The south bluff has numerous water seeps that have not been mapped or understood in the DEIS. These seeps continue all year round and are a vital source of fresh water for the salt-water marshes in the ACWR. The solutions proposed to water seepage in the DEIS might look good on paper but in the long haul in real life will not work well. The systems assume water will flow through gravel swales and drain pipes. In the winter this won't happen because they will be frozen, yet we know the seepage continues year round. In addition the proposed drainage structures will degrade over time as more and more of the fine sand and silt from the bluff face is washed into them.
21. The MOA Coastal Management Plan states that they should prevent construction that threatens the stability of the bluff, maintain vegetation in its natural state, discourage development in high hazard areas and mitigate hazards where possible. This excellent planning document has guided the development of Anchorage's coastline for decades. The Orange Modified route complies with none of these requirements. Why are we throwing out good planning to build this trail? Makes no sense.

Irreparable Harm to the Refuge

22. Throughout the DEIS the authors have systematically downplayed the real and inevitable damage the Orange Modified route will have on the ACWR. The reality is we can have a trail or a refuge but not both. The DEIS should make that choice clear to the public but instead it obfuscates the issue, drawing false conclusions at every turn. The data collected by the DEIS team and ADFG clearly show that critical populations of mammals and birds will be impacted by this trail.
23. The DEIS admits impact to mammals but offers no real solutions to minimizing the impact. The trail will supplant the mammal movement along the base of the bluff, overlaying bear, lynx, moose and other mammal paths with human trail use. The inevitable conflicts will eventually reduce the mammal populations using the refuge.
24. The DEIS does not adequately address the interrelationships of wildlife in the ACWR. It acknowledges impact to mammals but has no substantive discussion of how those impacts will affect other parts of the ecosystem, rodents, plants, birds, etc. We all know that tinkering with one part of the system affects other parts. It is the job of the DEIS to understand those impacts and convey them to the public so that informed decisions can be made. This DEIS does not do that.
25. Habitat comparisons are misleading in the DEIS. It treats all similar habitats equally when calculating wildlife impacts which on the surface seems very objective but in reality misses an important and obvious point: concentrations of wildlife are greater in and around the ACWR than inland areas that are already impacted by urban development.
26. Time and time again the DEIS brushes aside potential wildlife impacts with unsupported generalizations. For example it admits to impacting 30% of the crane nests in the ACWR but casually claims they will simply move elsewhere. How do they know that? There doesn't seem to be any scientific support for this assertion. It is just pure opinion or speculation.
27. Clear cutting the lower sections of the bluff as shown in the trail profiles between the Motocross and Campbell Creek will be a massive blow to wildlife habitat in that area. 25%-50% of the most critical adjacent habitat will be completely destroyed. This will have a huge impact on the entire ecosystem which the DEIS neither acknowledges or mitigates.

Short Sighted Planning

28. In the not so distant future we will have multi-use trails in coastal settings extending the full length of Turnagain Arm. 50 miles or more of free flowing trails with coastal views! Along that route there is only one wildlife refuge, right here in our town. This is an incredible resource and asset for Anchorage. A venture that no other city in the world hosts nesting cranes, migrating snow geese, and traveling lynx within their boundaries. This is part of what makes us unique in the world and it is extremely shortsighted to even consider threatening that resource as the Orange Modified route surely does.
29. Our grandchildren and future generations of Alaskan's deserve to enjoy the AWCR too. If we want to keep this resource we have to work hard at it. The incipient impacts of urbanization will continue to make it more and more difficult for the wildlife to remain in our city. Displacing their habitat with this trail will make it impossible to retain even a semblance of what we have now in the AWCR. Proper development of the AWCR would be to create individual access points with short loops on boardwalks. This will allow Anchorage to enjoy the refuge without destroying it in the process.

draft

30. Enhancing access to the AWCR without degrading its wildlife values will develop into a significant economic benefit for the state and city of Anchorage. There is a growing demand for this type of experience around the world. The AWCR could develop into a 'must see' feature for visitors to Anchorage.
31. Don't be shortsighted. Many cities have scenic trails and Anchorage already has many already. Our unique legacy to the citizens of Anchorage and the world could be the experience of Alaskan wildlife right here in our town. Choose the AWCR not the Orange Modified trail. We cannot have both.

In conclusion stop this unwarranted attack on the AWCR and this ill-conceived Orange Modified route right now. Let's get back to some sensible planning that respects our Alaskan values. Stop the process, regroup and do it right this time!

Sincerely,

Michael P. Carlson

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September 23, 2002

The Honorable Pat Pourchot, Commissioner
Department of Natural Resources
550 W. 7th Ave., Ste. 1400
Anchorage, Alaska 99501-3554

The Honorable Frank Rue, Commissioner
Department of Fish and Game
PO Box 25526
Juneau, Alaska 99802-5526

Honorable Joseph L. Perkins, Commissioner
Department of Transportation and Public Facilities
3132 Channel Dr.
Juneau, Alaska 99801-7898

Re: Land Status in the Anchorage Coastal Wildlife Refuge
2002 Op. Att'y Gen. No. 1

Dear Commissioners Pourchot, Rue, and Perkins:

You have asked a number of questions regarding land title issues related to the Anchorage coastal trail extension project. Most of the questions center around conveyances of the former Point Campbell military reserve and of land at the mouth of

Campbell Creek that are within the exterior boundary of the Anchorage Coastal Wildlife Refuge (ACWR or refuge) to the Municipality of Anchorage¹

SUMMARY OF QUESTIONS AND CONCLUSIONS

More specifically, you ask: (1) whether the 1982 conveyance to the municipality of land at Point Campbell between the "toe of the bluff" and the mean high tide line is void; (2) whether certain land at the mouth of Campbell Creek is state land or municipal land; (3) whether a third party could bring suit to invalidate either the Point Campbell or mouth of Campbell Creek conveyance; (4) whether privately owned and municipal lands within the outer boundaries of the Anchorage Coastal Wildlife Refuge are inholdings are excluded from the refuge; (5) whether reservation of the mineral estate in non-state-owned land allows the Department of Fish and Game (ADF&G) to assert regulatory authority over activities on the non-state-owned land; (6) whether a right-of-way across private land within the refuge boundaries acquired by the Department of Transportation and Public Facilities (DOT&PF) automatically becomes part of the refuge; and (7) whether any provision in state law extends permitting or refuge authority to land adjacent to the refuge.

In short, we conclude: (1) the Point Campbell land was never part of the Anchorage Coastal Wildlife Refuge and the conveyance to the municipality is valid; (2) the municipality holds equitable title to the land at the mouth of Campbell Creek and

¹ For simplicity, in this memorandum the terms Municipality of Anchorage, municipality, and Anchorage include the Greater Anchorage Area Borough.

it is not part of the Anchorage Coastal Wildlife Refuge; (3) a third party who meets the jurisdictional requirements could bring suit to invalidate the conveyances, but we do not think the suit would be successful; (4) private and municipal lands within the exterior boundaries of the ACWR are not inholdings and are not part of the refuge; (5) reservation of the mineral estate in private land does not give ADF&G broad regulatory authority over the land estate; (6) a right-of-way acquired by DOT&PF does not automatically become part of the refuge; and (7) we are unaware of any provision of state law that extends ADF&G's authority to regulate refuge land to adjacent land. A more detailed discussion of the facts and our conclusions follows.

FACTS

1. Creation of the Anchorage Coastal Wildlife Refuge

In 1971, the legislature created the predecessor to the ACWR, the Potter Point State Game Refuge. Sec. 1, ch. 81, SLA 1971, codified at former AS 16.20.030(b). It provided:

The following described state-owned lands and adjacent state waters, excluding existing [and]² applied-for highway, riparian lines and railway rights-of-way as of the effective date of this Act, are established as the Potter Point State Game Refuge: All lands and waters south and west of and adjacent to the toe of the bluff which extends from Campbell Point southeasterly to Potter Creek.

² The word "and" was added as recommended by the revisor of statutes in sec. 28, ch. 53, SLA 1973.

According to a 1981 management plan, approximately 32 percent of the land within the outer boundary was privately owned. In 1975, the legislature amended AS 16.20.030(b) to allow the municipality one year to adopt zoning for the privately owned land, and if the municipality failed to act, to authorize the Department of Natural Resources (DNR) to adopt zoning regulations for the private land. Sec. 1, ch. 192, SLA 1975. This provision appears to be in response to a concern that the state lacked authority to regulate private land within park or refuge boundaries and to preserve the land until the state could acquire it and add it to the refuge. *See* Attachment 1, unpublished memorandum from James E. Cantor, Assistant Attorney General, to Bruce M. Botelho, Attorney General, dated January 17, 2001 (Cantor memo).

In approximately 1983, an evaluation of the Potter Point State Game Refuge revealed concerns with the imprecision of the "toe of the bluff" description of the landward boundary and the desire to add additional land to the refuge. In 1988, legislation addressing these and other issues became law. Chapter 8, SLA 1988, repealed AS 16.20.030(b) and enacted AS 16.20.031, redrawing the boundaries and renaming the refuge the Anchorage Coastal Wildlife Refuge. The statute includes in the refuge the "described state-owned land and water," changes landward boundaries from the "toe of the bluff" to the "20 foot elevation contour," and modifies the boundary to describe land from Point Campbell to Point Woronzof and land at the mouth of Campbell Creek, as well as other land. It eliminates DNR's authority to zone private land within the refuge boundaries, and prohibits the use of eminent domain to acquire land for addition to the

refuge. The statute also provides that land owned by the municipality within the ACWR boundary may be included in the refuge and managed pursuant to a management agreement approved by ADF&G and the municipality. Unlike the statutes establishing some state game refuges, the statutes establishing the ACWR and its predecessor Potter Point State Game Refuge do not specify that land and water acquired in the future by the state lying within the exterior boundaries of the refuge are included in the refuge.

2. Point Campbell Military Reserve

In 1971, when the refuge was created, most of the land at Point Campbell was owned by the United States and was within the Point Campbell Military Reserve. E.O. 1920½, April 21, 1914. In 1976, the United States, the state, and Cook Inlet Region, Inc. (CIRI), entered an agreement to settle CIRI's land claims that, among other things, provided for conveyance of the Point Campbell land to the state with the condition that the land be used for park, recreation, or other public purposes. Terms and Conditions for Land Consolidation and Management in the Cook Inlet Area (T & C). Congress and the Alaska Legislature approved this agreement. Public Law 94-204, 43 U.S.C. 1611 note; ch. 19, SLA 1976.

Anchorage selected various portions of the Point Campbell land in 1966, 1975, and 1981. In June 1968, DNR issued a decision to convey to the municipality portions of Sections 5 and 8, T. 12N, R. 4W, S.M., totaling 320 acres, and State Patent No. 854 was issued later that year. Also in 1968, DNR issued a final decision to convey to the municipality GLO Lots 6 and 7, Section 8, T. 12N, R. 4W, S.M., totaling 69.55 acres.

Patent No. 1626 for this land was issued in 1973. It is our understanding that these conveyances are not at issue.

The United States conveyed the Point Campbell Military Reserve land to the state in June 1982 in Patent No. 50-82-074, subject to the restriction as to use required by the T & C. In October 1982, DNR issued a final decision to convey the land to the municipality pursuant to then AS 38.05.315 (renumbered AS 38.05.810 in 1984), which allows conveyance of land for public and charitable use, and State Patent No. 6757 was issued October 29, 1982. The conveyance included land between the toe of the bluff and the mean high tide line.³

3. Land at the Mouth of Campbell Creek

Anchorage applied for approximately 75 acres of land at the mouth of Campbell Creek in 1979 as part of its municipal entitlement. DNR initially rejected the selection in 1980 on the ground that the land was within the Potter Point State Game Refuge and not available for municipal selection. The municipality appealed, and in 1982 DNR determined that approximately 6.14 acres in GLO Lot 4, Section 15, T. 12N, R. 4W, S.M.

³ It is our understanding that the portion of the conveyance in question is the land between the toe of the bluff and the mean high tide line within the following: GLO Lot 4 of Section 6, GLO Lots 1, 2, and 3 of Section 7, and GLO Lots 2 and 3 of Section 8, T. 12N, R. 4W, S.M.; and GLO Lot 1 of section 1, T. 12 N, R. 5W, S.M.

was not in the refuge and thus was available for selection. DNR issued a final decision approving the non-refuge portion of the selection and rejecting the rest on June 10, 1986.⁴

DNR issued survey instructions to the municipality in 1988 for survey of the 6.14 acres. The municipality has only recently performed the survey; therefore, patent has not issued and legal title as shown in the Recorder's Office remains in the state. Also in 1988, this land was included within the land description for the ACWR pursuant to AS 16.20.031.

DISCUSSION

1. Is the 1982 conveyance to the Municipality of Anchorage of Point Campbell land, including land below the toe of the bluff, void?

Your framing of this question lists a number of concerns about the validity of this conveyance. However, all of the arguments are premised on the assumption that the Point Campbell land was part of the refuge. We do not believe that any of the Point Campbell land conveyed in State Patent No. 6757 has ever been part of the refuge; therefore, DNR acted well within its authority when it conveyed the land to the municipality.

The statutes establishing the Potter Point State Game Refuge and the ACWR both limit the refuge to state-owned land and water within an area that includes a large amount of private and municipal land. As detailed in the Cantor memo, the private and municipal

⁴ A 0.86 acre parcel containing a municipal lift station was also approved for conveyance under AS 38.05.810 in the decision.

land, while within the outer boundary line of the refuge, are not part of the refuge and are not within the jurisdiction of the refuge. That memorandum is consistent with previous opinions issued by this department, including 1985 Op. Att'y Gen. No. 4 (Nov. 8, 1985) and 1980 Inf. Op. Att'y Gen. (Oct. 9, 1980; A66-022-31).

Significantly, the statutes establishing the Potter Point State Game Refuge and the ACWR, unlike those for some refuges and state parks, did not include language designating as part of the refuge land and water acquired in the future by the state lying within the described boundaries. Cf. AS 16.20.030(c); AS 16.20.033; AS 16.20.036; AS 16.20.038. It is a basic principle of statutory construction that every word in a statute must be given effect if possible. *Homer Elec. Ass'n. v. Towsley*, 841 P.2d 1042, 1045 (Alaska 1992). The courts will construe state statutes *in pari materia*, i.e., give the same terms the same meaning, where the statutes were enacted at the same time or deal with the same subject matter. *Underwater Construction, Inc. v. Shirley*, 884 P.2d 150 (Alaska 1994). Furthermore, absent legislative history to the contrary, the courts will interpret all omissions as exclusions.⁵ *John v. Baker*, 982 P.2d 738, 762 (Alaska 1999).

The statutes establishing some refuges specifically provided that land acquired in the future by the state lying within the refuge boundary would automatically become part of the refuge. Others, including the statutes governing the ACWR, omitted that language.

⁵ This principal is commonly expressed using the Latin phrase "expressio unius est exclusio alterius."

The statutes establishing refuges clearly relate to the same subject matter, and several were adopted by the same legislature. For example, the Ninth Alaska Legislature established the Goose Bay State Game Refuge and included land acquired in the future. Ch. 101, SLA 1975; AS 16.20.030(c). The same legislature omitted that language in establishing the Palmer Hay Flats State Game Refuge. Ch. 102, SLA 1975; AS 16.20.032. When the legislature wanted to add land acquired by the state after 1975 to the Palmer refuge, it did so by legislation, obviously viewing the legislation as necessary to include the land. *See* ch. 49, SLA 1985.

The omission of the language including land acquired in the future from the ACWR legislation leads to the conclusion that land acquired by the state after enactment of the statute did not automatically become part of the refuge. In 1971, when the Potter Point State Game Refuge was created, the United States owned the Point Campbell land and held it as a military reserve. When the statute was amended in 1973 and 1975, the federal government still owned the land.⁶ The state received the Point Campbell land from the United States and conveyed it to the Municipality of Anchorage in 1982. The legislature took no action regarding the ACWR refuge until 1988, still omitting the language to include after-acquired state land and six years after title vested in the

⁶ The 1975 amendment was enacted by the same legislature that included land acquired in the future in the Goose Bay, Susitna Flats, and Trading Bay State Game Refuges. Ch. 101, SLA 1975; ch. 140, SLA 1976; ch. 255, SLA 1976. The legislature did not include that language in its amendments to the Potter Point State Game Refuge statute. Ch. 192, SLA 1975.

municipality. The Point Campbell lands have never been part of the refuge, and nothing prohibited DNR from conveying the land.⁷

Because the Point Campbell lands were never included in the refuge, the questions raised in your request for advice relating to the availability of the land for municipal selection, notice requirements, and whether a conveyance of legislatively designated land is unconstitutional and void are not at issue, but a brief discussion of these points may be helpful.

The 1985 Attorney General's opinion concludes that land in refuges cannot be transferred out of state ownership without legislative action. This opinion, in and of itself, does not "void" any conveyance or nullify the patent to the municipality. Although, if the land was part of the refuge the conveyance might be subject to attack on the grounds that DNR lacked authority to issue it, that attack would be subject to equitable defenses, with the municipality in a strong position to claim the status of a bona fide purchaser. *See* 1980 Inf. Op. Att'y Gen. (Oct. 9, 1980; A66-022-81).

You correctly note that, in general, legislatively designated land and land acquired by the state in any manner except under the Alaska Statehood Act is not available under

⁷ An argument may be raised that the language in the ACWR statute (and other refuge statutes) prohibiting acquisition of land for the refuge by eminent domain, but allowing acquisition by purchase or exchange, indicates legislative intent to include after-acquired land in the refuge. We do not think this overcomes the omission of the after-acquired language. The legislature's actions to add land to the Palmer Hayflats State Game Refuge supports this view, as does the conclusion in the 1985 opinion and the Cantor memo that the language in the legislation referring to private land as "within the refuge" does not mean that private land is actually a part of the refuge.

the Municipal Entitlement Act. However, the municipality received the Point Campbell land pursuant to AS 38.05.315 (renumbered AS 38.05.810). Conveyances to municipalities under this statute do not conflict with the Municipal Entitlement Act.

Next, you question whether the apparent lack of notice to ADF&G under AS 16.20.050 of the proposed conveyance and the agencies' lack of knowledge that the land was in the refuge void the conveyance. In fact, ADF&G did receive notice under AS 38.05.945. In addition, any objection from ADF&G would be "internal to state government, and it appears unlikely that equity would allow such an objection to overturn [a conveyance to] an innocent third party, a party which had no knowledge of the boundary confusion." 1980 Inf. Op. Att'y Gen. (Oct. 9, 1980; A66-022-81) at p.5.

Finally, you ask whether the legislative designation of land seaward of the "toe of the bluff" is a valid existing right to which the conveyance is subject. "Valid existing rights" refer to vested property rights such as homestead claims or easements. The "toe of the bluff" is simply the descriptor used by the legislature in establishing the exterior boundary of the Potter Point State Game Refuge, rather than a claim to land in its own right. It would not cause the land to be retained.

2. Does the land at the mouth of Campbell Creek belong to the state or to the municipality?

As we understand the facts, the land in question at the mouth of Campbell Creek was not included in the Potter Point State Game Refuge, but is within the boundaries of the land designated as the ACWR in 1988. DNR issued a final decision approving the land for conveyance to the municipality in 1986. You question whether the land is still

owned by the state and therefore became a part of the ACWR in 1988 because the land has not yet been patented to the municipality. Although the state still holds bare legal title to the land, it is well established that equitable title passed to the municipality when the decision to convey became final. Former AS 29.18.204 (now AS 29.65.040) specifically provides that municipal entitlements are vested property rights. Former AS 29.18.205 (now AS 29.65.050(b)) mandates that a patent for an approved selection *shall be issued* within three months after approval of the survey. Issuance of patent is not discretionary. In addition, former AS 29.18.207 (now AS 29.65.070(b)) authorizes the municipality to execute conditional leases and make conditional sales with approval of the director. This approval was granted to the municipality in the decision approving the conveyance. The municipality has a vested right to receive a patent to this land; the subsequent inclusion of the land at the mouth of the creek in the legislation describing the refuge cannot defeat the municipality's right to patent.

The municipality's title to the land at issue is analogous to the title the state has in land tentatively approved for conveyance by the United States. Upon receipt of tentative approval, all right, title, and interest of the United States vest in the state. Congress made this explicit in the Alaska National Interest Lands Conservation Act. See 43 U.S.C. 1635(c). The Alaska Supreme Court has quoted with approval U.S. Supreme Court caselaw holding that "[I]t is . . . well settled that a claimant to public land who has done all that is required under the law to perfect his claim acquires rights against the government and that his right to a legal title is to be determined as of that time. . . ."

Moore v. State, 992 P.2d 576, 580 (Alaska 1999), quoting *Payne v. New Mexico*, 255 U.S. 367, 371 (1921); see also *Wyoming v. United States*, 255 U.S. 489 (1921). Similarly, the final decision by the state approving the municipal selection vested title in the municipality.

You have also asked whether DNR was required to notify and obtain approval from ADF&G pursuant to AS 16.20.050 – 16.20.060 before approving the municipal selection. When DNR approved the municipality's selection, the land at the mouth of the creek was not within the ACWR; therefore AS 16.20.050 – 16.20.060 do not apply. See 1985 Op. Att'y Gen. No. 4. In any event, actual notice of the selection was given. Based on the amount of time that has passed and equitable considerations, any defect that might exist based on the notice would not be fatal to the municipality's vested right to receive patent.

The opinion request also asks whether DNR's decision can be amended to retain the land in state ownership since patent has not yet issued. Unless the municipality consents, DNR has no authority to alter the conveyance.

3. Could a third party sue to invalidate the conveyances at Point Campbell or the mouth of Campbell Creek, and would such a suit be successful?

It is always possible that someone will sue to invalidate these conveyances. Even assuming a third party met the jurisdictional prerequisites for standing, for the reasons outlined in response to the first and second questions, we do not believe such a suit would be successful. The mere possibility that someone might bring a lawsuit does not cloud the municipality's title.

4. Are private and municipal lands within the external boundaries of the ACWR inholdings?

Both the 1985 Attorney General's opinion and the Cantor memo conclude that only the described state-owned land and water within refuge boundaries are included in the refuge and subject to the statutes governing refuges. We reaffirm that conclusion. Private and municipal land within the exterior boundaries of the ACWR are not "inholdings" subject to regulation by ADF&G.⁸

5. Does the reservation of the mineral estate in non-state-owned land allow ADF&G to assert regulatory authority over activities on the non-state-owned land?

Numerous parcels of private and municipal land lie within the exterior boundaries of the ACWR. As discussed above and in previous memoranda, such parcels are not part of the refuge. We understand that the United States conveyed the private land directly to the owners or their predecessors and the conveyances included the entire fee title; there is no reserved mineral estate underlying this land.

State and federal law require that the state reserve the mineral estate to itself when the state conveys land or interests in land out of state ownership. AS 38.05.125; sec. 6(i), Alaska Statehood Act, Pub. L. 85-508, 72 Stat. 339, as amended. This requirement applies to conveyances to political subdivisions of the state, including the Municipality of Anchorage, under AS 29.65 and its predecessors. For the land in question that the state

⁸ Municipal land within the ACWR boundary may be included in the refuge, but only pursuant to an express agreement between ADF&G and the municipality. AS 16.20.031(d). We understand that no such agreement exists currently.

conveyed to the municipality, the state retained the mineral estate. However, the municipally-owned land estate is not part of the refuge. *Hayes v. A.J. Associates, Inc.*, 960 P.2d 556, 562, n. 14 (Alaska 1998) (“Privately owned surface lands are not ‘state land’ even though the State has reserved mineral rights in them under AS 38.05.125(a).”).

The mineral estate reserved in conveyances by the state consists of the “oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils.” AS 38.05.125. It does not include sand and gravel which are “material” and part of the land estate. AS 38.05.965(10).⁹

State ownership of the reserved mineral estate is very unlikely to be of any relevance to the coastal trail extension project. To our knowledge, mineral exploration and development are neither occurring nor proposed. In fact, AS 16.20.031(f) closed the refuge to mineral entry. Development of a recreational trail will occur in the land estate and unless the land estate is itself included in the refuge, it is not subject to ADF&G’s authority over refuge land. While ADF&G and the Boards of Fisheries and Game have general authority over fish and game resources and habitat throughout the state irrespective of land ownership (*see, e.g.*, AS 16.05.020, AS 16.05.251, and

⁹ Confusion often arises as to ownership of sand and gravel in Alaska because under the Alaska Native Claims Settlement Act, the regional corporations receive the “subsurface estate” underlying “surface estate” conveyed to the village corporations. 43 U.S.C. 1613. For purposes of ANCSA, the courts have construed “subsurface estate” to include sand and gravel, leading to disputes over use of these materials to develop the surface estate. *Koniag, Inc., v. Koncor Forest Resource*, 39 F.3d 991 (9th Cir. 1994). “Subsurface estate” and “mineral estate” are not the same. *See Norken Corp. v. McGahan*, 82 P.2d 622 (Alaska 1991).

AS 16.05.255), there is no indication in your request for advice that those authorities are at issue here.

6. Would a right-of-way acquired by DOT&PF across private land within the refuge boundaries automatically become part of the refuge?

The Cantor memo concluded that DOT&PF can acquire private land within the refuge boundaries for a coastal trail and the land does not become refuge land. For the reasons stated in that memorandum and here, we believe that conclusion is correct.

7. Does any provision of state law extend ADF&G's authority to regulate refuge land to adjacent land similar to the federal case law on "constructive use"?

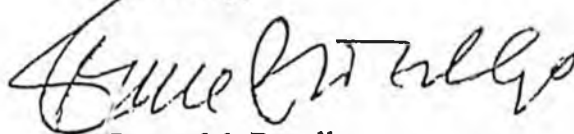
A provision of federal law commonly referred to as 4(f) allows federal funds to be used for a transportation project using publicly owned park, refuge, or recreation land of national, state, or local significance only if there is "no prudent and feasible alternative" and every effort is made to minimize the harm. 49 U.S.C. 303(c). The federal courts, through a concept referred to as "constructive use," have extended this protection to apply to situations where "a road significantly and adversely affects park land even though the road does not physically use the park." *Sierra Club v. Department of Transportation*, 948 F.2d 568, 573 (9th Cir.1991). See also *Laguna Greenbelt, Inc. v. Department of Transportation*, 42 F.3d 517 (9th Cir. 1994).

We are aware of no similar state statute or interpretation that would provide a basis for extending ADF&G's refuge permitting and regulatory authority to land the legislature did not designate as refuge land.

CONCLUSION

For the reasons discussed above and in previous memoranda we conclude that the land at Point Campbell and at the mouth of Campbell Creek is not part of the ACWR and is not subject to ADF&G's refuge permitting and regulatory authorities.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce M. Botelho".

Bruce M. Botelho
Attorney General

Attachment

BMB/EJB

MEMORANDUM

State of Alaska
Department of Law

To: Bruce M. Botelho
Attorney General

Date: January 17, 2001

AG File No: 661-01-0080

Telephone: 465-5160

Subject: Anchorage Coastal
Trail Planning

From: James E. Cantor *je.*
Assistant Attorney General
Transportation Section, Anchorage

With review
and edits by: Kevin Saxby *KMS* and Lance Nelson *LN*
Assistant Attorneys General
Natural Resources Section, Anchorage

I. Questions Presented.

The Department of Law's Transportation and Natural Resources Sections have received written requests for advice from the Department of Transportation and Public Facilities and the Department of Fish and Game. Neither agency has followed the process for requesting a memorandum of advice or opinion of the Attorney General.

The agencies seek advice concerning the effect of the statute establishing the Anchorage Coastal Wildlife Refuge upon one potential routing of a coastal trail. The questions involve the location and effect of the refuge boundary, the applicability of § 4(f) of the federal transportation act of 1966 to private property within the outer boundary of the refuge, and the authority to condemn land for a coastal trail.

II. The location and effect of the refuge boundary.

AS 16.20.031(a) establishes the Anchorage Coastal Wildlife Refuge as follows:

The following described state-owned land and water is established as the Anchorage Coastal Wildlife Refuge and shall be managed as a state game refuge for the protection of waterfowl, shorebirds, salmon, and other fish and wildlife species, and their habitat and for the use and enjoyment of the people of the state:

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(1) Township 13 North, Range 4 West, Seward Meridian

Section 20: SE 1/4 seaward of the 20 foot elevation contour

SE 1/4 NE 1/4 seaward of the 20 foot elevation contour

Section 29: E 1/2 seaward of the 20 foot elevation contour

[The detailed land description of the refuge continues in the bound version of the statutes for an additional 48 lines.]

A large amount of private and municipal property exists within the area described in AS 16.20.031(a). Much of the property within and along the landward boundary of the area described in AS 16.20.031(a) is not owned by the state. The Department of Transportation and Public Facilities has examined the potentiality of routing a trail over these private and municipal properties, which has raised questions about whether such a trail would be within and part of the refuge. For the reasons stated below, the answer is that although such a trail would be within the outer boundaries of the refuge, the trail would not be part of nor within the jurisdiction of the refuge.

A. Historical analysis of the extent of the Anchorage Coastal Wildlife Refuge.

The legislature established the predecessor to the Anchorage Coastal Wildlife Refuge in 1971. § 1 ch. 81 SLA 1971, enacting AS 16.20.030(b). That predecessor, the Potter Point State Game Refuge, extended northwards along the coast from Potter Creek to Campbell Point. According to a 1981 management plan, approximately 32 percent of the land within the outer boundary of the refuge was privately owned.

In 1975, the legislature added a provision to AS 16.20.030(b) giving the Municipality of Anchorage one year to zone the privately owned land within the outer boundary of the Potter Point State Game Refuge. If the Municipality did not act within a year, the Department of Natural Resources was given the power to adopt zoning regulations governing privately owned land within the refuge. A similar scheme exists in some other refuges. Although the legislative history of the 1975 provision is sparse, the sponsor of the bill, Senator Rodey, explained to the House Committee on Community and Regional Affairs that "The State is attempting to buy all the lands that have been dedicated for park purposes but don't [sic] have enough money right now. There are still private lands inside the boundaries of the refuge and it is important to zone these to keep them consistent with the use of the refuge." Meeting Minutes, May 6, 1975.

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The legislative history of the 1975 provision includes an unpublished memorandum from the Attorney General, drafted by Rodger Pegues, dated February 18, 1975, evaluating whether in the absence of specific legislation the state has the power to regulate the use of private land within the boundaries of a state park or recreation area. The memorandum notes that the statutes establishing the parks and recreation areas refer to those areas as consisting of "state-owned lands" and provide for the acquisition of private land within the parks and recreation areas. In this way, the question is similar to that presented by statute establishing the Anchorage Coastal Wildlife Refuge. The memorandum concludes that the state may not regulate the private lands that are within the outer boundaries of the parks and recreation areas and suggests, somewhat semantically, that because the private lands are not regulated as parks and recreation area lands they are not actually within the parks and recreation area boundaries. The 1975 provision allowing the Department of Natural Resources to zone the privately owned lands within the Potter Point State Game Refuge appears to be a response to the concern that the state has no other power to regulate private lands within the outer boundary of the refuge. Its enactment indicates legislative awareness of the concern. As will be seen below, this zoning provision was later repealed, leaving the private land within the refuge unregulated.

In 1980, the Office of the Attorney General issued a memorandum of advice, drafted by Assistant Attorney General Thomas Meacham, evaluating whether the Department of Fish and Game had authority over a tract of land within the Potter Point State Game Refuge that the Department of Natural Resources had mistakenly conveyed to a private party. 1980 Inf. Op. Att'y Gen. (October 9; A66-022-81). The memorandum is particularly applicable because the Potter Point State Game Refuge was the predecessor to the Anchorage Coastal Wildlife Refuge. The memorandum "concluded that the subject lands are not now a part of the Potter Point State Game Refuge, and that the Commissioner does not have the authority to review and approve development plans for these lands pursuant to AS 16.20.060." AS 16.20.060 is a statute giving the Department of Fish and Game authority to review construction plans in a game refuge; however, pursuant to AS 16.20.050 this authority only applies "[w]here the use, lease, or disposal of real property in state game refuges created by AS 16.20.010 - 16.20.080 is under the control or jurisdiction of the state, whether through federal permit or state ownership." The Department of Fish and Game lacked authority over the land at issue because that land was private, not public, land within the outer boundary of the refuge.

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The conclusion reached in the 1980 memorandum of advice was based in part on an interpretation of the statute creating the Potter Point State Game Refuge. That statute stated, in pertinent part:

The following described state-owned lands and adjacent state waters, excluding existing and applied for highway, pipelines and railway rights-of-way as of May 20, 1971, are established as the Potter Point State Game Refuge: All lands and waters south and west of and adjacent to the toe of the bluff which extends from Campbell Point southeasterly to Potter Creek.

AS 16.20.030(b): Because the lands conveyed into private ownership are no longer "state-owned," the memorandum advised, "they are not a part of the refuge." Because they are not a part of the refuge, development plans are not subject to review by the Department of Fish and Game under AS 16.20.060. The Department of Fish and Game still had jurisdiction under other, non-refuge statutes such as the statutes governing anadromous fish streams.

The memorandum analyzed an inconsistency in the language of the statute concerning the use of the word "within" in the description of the authority to zone "privately owned land within the refuge." The memorandum mused that if "the refuge description, by its own terms, includes only 'state-owned lands' within the refuge . . . by definition there could be no privately-owned lands within the refuge." The Department of Fish and Game recently considered a similar conundrum created by the words of the current statute establishing the Anchorage Coastal Wildlife Refuge. The problem was resolved in the 1980 memorandum of advice by reasoning that because such an interpretation would nullify the statute's zoning authority, "[t]he proper interpretation of such a boundary description appears to be that while only state-owned lands are designated as refuge lands (and indeed, the Legislature could not designate private lands as refuge lands without paying fair compensation to the private landowners), the boundary line encompassing all of the state-owned lands may contain within it parcels of private land." Thus, although the Department of Fish and Game would not have authority over the private lands, the private lands would be considered within the refuge for the purpose of the statutorily-authorized activity – in that case zoning by the Department of Natural Resources.

In 1985, the Attorney General issued a formal opinion regarding the respective authorities of the Departments of Natural Resources and Fish and Game in game refuges, game sanctuaries, and fish and game critical habitat areas. This opinion and the chart attached to it formally confirmed the Department of Law's position that state game

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refuges only consist of the state-owned land within the refuge boundaries (in contrast to critical habitat areas which include both private and state land).

In approximately 1983, a task force evaluated the Potter Point State Game Refuge. Among other problems, the 1971 legislation had not clearly defined the landward or the seaward boundaries of the refuge. The Anchorage Municipal Property Management Division and the Alaska Department of Fish and Game drafted proposed legislation based on the recommendations of the Potter Marsh Task Force. The proposed legislation would, among other things, define a seaward boundary for the Potter Point State Game Refuge to exclude certain mineral interests while extending the refuge further to the north from Point Campbell to Point Woronzoff.

This legislation was ultimately enacted in 1988. Ch. 8 SLA 1988, enacting AS 16.20.031. The legislative enactment redrew the boundaries essentially as proposed and renamed the refuge the Anchorage Coastal Wildlife Refuge. It eliminated the Department of Natural Resources' power to adopt zoning regulations governing privately owned land within the refuge, § 3 ch. 8 SLA 1988, and limited government's ability to acquire the privately owned land within the refuge by prohibiting the use of eminent domain as a means of acquiring land for the refuge. The Department of Fish and Game and the Municipality of Anchorage were only given authority to acquire privately owned land within the refuge by purchase, exchange, or otherwise, but not by eminent domain. The Anchorage Coastal Wildlife Refuge legislation appears to have accorded greater rights to private land owners than the law establishing the Potter Point State Game Refuge because zoning and eminent domain for refuge purposes were no longer allowed.

The 1988 legislation mimicked the opening line of the statute that had established the Potter Point State Game Refuge, stating "The following described state-owned land and water is established as the Anchorage Coastal Wildlife Refuge . . .". In establishing certain powers and prohibitions, the legislation also mimicked the prior description of privately owned land "within" the refuge (that description had previously applied to the power to zone within the refuge). Thus, AS 16.20.031(e) was enacted to read: "The state or the Municipality of Anchorage may not acquire privately owned land within the Anchorage Coastal Wildlife Refuge described in (a) of this section by eminent domain for inclusion within the Anchorage Coastal Wildlife Refuge." AS 16.20.031(d) uses similar language in authorizing the Department of Fish and Game and the Municipality of Anchorage to enter an agreement "for the management of the land within the Anchorage Coastal Wildlife Refuge that is owned by the Municipality of Anchorage . . .".

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There is no indication that anyone interpreted the legislature's use of the 'state-owned land' or 'within the refuge' phrases as attempts to change or override prior interpretations of those phrases. To the contrary, the Department of Fish and Game's 1981 plan for the management of the Potter Point State Game Refuge states: "Only State-owned lands and adjacent State waters comprise the Refuge as established by Alaska Statute 16.20.030(b)." 1981 plan at 1. The Department of Fish and Game's 1991 plan for the management of the Anchorage Coastal Wildlife Refuge similarly states: "Only state land and water encompassed by the boundary are included in the refuge. Privately owned lands within the refuge boundaries are not managed as refuge lands," 1991 plan at A-1, and "Private lands within the refuge boundary are not part of the refuge and may only be acquired from willing sellers," 1991 plan at A-26. The land status map appended to the 1991 plan similarly and unambiguously states the Department of Fish and Game's understanding that "The refuge boundary shown depicts the statutory extent of the refuge. Private lands within this boundary are not part of the refuge."

- B. Private properties within the outer boundary of the refuge are not a part of the refuge.

The Department of Fish and Game has traditionally drawn the refuge boundary as the outer boundary of the area defined by the legislature. This interpretation is reasonable and not inconsistent with the statute. However, private properties within the outer boundary are not part of the refuge. The Department of Fish and Game as refuge manager has no jurisdiction over private properties within the outer boundary. The Department of Fish and Game as refuge manager may have jurisdiction over municipal properties, but only to the extent allowed by management agreements adopted pursuant to AS 16.20.031(d). The Department of Fish and Game's authority, if any, under other non-refuge statutes is not impacted by this opinion.

To the extent the limitations of the English language led the statutory drafters to use the word 'within' in differing manners in the same statute, the private and municipal properties within the outer boundary of the refuge are only 'within the refuge' for the specific purposes enumerated. Thus, the Department of Fish and Game and the Municipality of Anchorage may enter into agreements governing the management of municipal lands 'within the refuge' as specified in AS 16.20.031(d), and the Department of Fish and Game and Municipality of Anchorage may acquire privately owned land 'within the refuge' by purchase, exchange, or otherwise, except by eminent domain, as specified in AS 16.20.031(e).

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III. The applicability of § 4(f) to private lands within the outer boundary of the Anchorage Coastal Wildlife Refuge.

Section 4(f) is embodied in 23 U.S.C. § 138 and 49 U.S.C. § 303, both of which set conditions upon the Secretary of Transportation for the approval of a transportation program or project requiring the use of "publicly owned land" of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance. Although the determination of whether § 4(f) applies in a given situation is a federal decision, the words of the statutes exclude the private lands within the outer boundary of the Anchorage Coastal Wildlife Refuge from the strictures of § 4(f). This result comports with the determination that refuge managers have no jurisdiction over privately owned lands within the outer boundary of the Anchorage Coastal Wildlife Refuge.

IV. The authority of the Department of Transportation and Public Facilities to condemn land for a coastal trail.

The agencies have asked if the Department of Transportation and Public Facilities can acquire land within the outer boundary of the Anchorage Coastal Wildlife Refuge by eminent domain so that it can construct a coastal trail as a federally-funded transportation project. The answer is that the Department of Transportation and Public Facilities can acquire land by eminent domain for this purpose. Land acquired by eminent domain does not become refuge land.

A. Historical analysis of the authority to exercise eminent domain within the Anchorage Coastal Wildlife Refuge.

As discussed above, the Anchorage Municipal Property Management Division and the Alaska Department of Fish and Game drafted the original proposed legislation for the creation of the Anchorage Coastal Wildlife Refuge based on the recommendations of the Potter Marsh Task Force. The original proposal contained a prohibition on the acquisition of land within the refuge boundary by eminent domain. The Department of Natural Resources reviewed the proposed legislation before it was introduced in the legislature. The Department of Natural Resources memorialized its concerns and recommendations in Decision Memorandum #57, dated April 6, 1984, signed by all of the department's divisions, its two deputy commissioners, and its commissioner, Esther Wunnicke.

Decision Memorandum #57 included a recommendation to adopt specific wording concerning state land acquisition powers to clarify that the limitation on eminent domain

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related only to the purpose of adding land to the refuge. Decision Memorandum #57 explained:

5. State land acquisitions.

The proposed legislation reads "the State may not acquire by eminent domain privately owned land within the refuge boundary . . .". The refuge encompasses several miles of the Alaska Railroad and the Seward Highway (old and new). The proposed wording would not distinguish land acquisition for transportation purposes from refuge purposes. The substitutions presented below should clarify this situation.

"The State may not acquire land for refuge purposes by eminent domain within the refuge boundary . . .".

In letters dated June 20 and July 19, 1984, the Municipality of Anchorage asked Senator Vic Fischer to sponsor the proposed legislation. The Municipality forwarded to Senator Fischer the original proposal drafted by the Anchorage Municipal Property Management Division and the Alaska Department of Fish and Game, as well as the Department of Natural Resources' Decision Memorandum #57. On July 30, 1984, Senator Fischer sent a request to Legislative Legal Services asking it to draft a bill based on the proposal from the Anchorage Municipal Property Management Division and the Alaska Department of Fish and Game, with amendments incorporating all of the recommendations contained in Department of Natural Resources' Decision Memorandum #57.

The broad eminent domain language initially proposed by the Anchorage Municipal Property Management Division and the Alaska Department of Fish and Game was accordingly changed. The working draft distributed on November 26, 1984 by Senator Fischer and co-sponsor Representative Mike Szymanski contained the following language:

- (e) The state or the Municipality of Anchorage may not acquire privately owned land within the Anchorage Coastal State Wildlife Refuge described in (a) of this section by eminent domain for inclusion within the Anchorage Coastal State Wildlife Refuge. The Department of Fish and Game or the Municipality of Anchorage may acquire privately owned land within the Anchorage Coastal State Wildlife Refuge by purchase, exchange, or otherwise except by eminent domain.

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With the exception of a small change to the name of the wildlife refuge and the addition of a comma to correct a grammatical error, this exact language remained in all subsequent versions of the bill and was ultimately enacted four years later in 1988.

The legislation appears to have been initially stalled by an unrelated political dispute between one of the sponsors of the bill and the chairperson of a committee. The bill also appears to have engendered controversy over the need for and wording of an easement to Fire Island, and when a new Commissioner of Natural Resources questioned the need for closing the area to mineral entry. While the legislative history is replete with factual references to the proposed prohibition on acquisition by eminent domain for inclusion in the refuge, that provision does not appear to have raised any questions until 1988 when the Municipality elected a new mayor.

The new municipal administration asked that the northwards extension of the refuge from Point Campbell to Point Woronzoff be deleted, and suggested the prohibition on eminent domain was too broad. The concern over eminent domain appears to spring from the second sentence of the eminent domain provision. That sentence does not mention refuge purposes, and thus could be interpreted to prohibit the Municipality of Anchorage from acquiring land by eminent domain for all purposes. In a February 1, 1988 presentation to the House Resources Standing Committee, municipal spokesman Mark Johnson stated his understanding that the prohibition on eminent domain was included to prevent the Municipality from using eminent domain powers to extend the coastal trail through private land holdings. We have been unable to locate any other legislative history upholding this understanding, although it is certainly possible some people intended this result. In any event, Mr. Johnson believed the language in the second sentence of subsection (e) would prohibit the exercise of eminent domain for all municipal services, such as water and sewer lines. On February 10, 1998, upon the second reading of the bill, Representative Martin offered an amendment stating: "The Municipality of Anchorage may acquire privately owned land within the Anchorage Coastal Wildlife Refuge by eminent domain for water and sewer purposes." A vote was taken and the amendment was not adopted. Ultimately, the bill passed with no change to the extension of the refuge or the eminent domain language.

A last potentially relevant legislative action occurred in 1999 with the passage of HB 131, which stated: "Except for the public right-of-way and utility corridor created in this subsection [to Fire Island] and identified in the management plan, for a realignment of the right-of-way for the new Seward Highway, or for a realignment of the right-of-way for the Alaska Railroad, a public right-of-way or other easement for surface transportation may not be created across the refuge without prior approval of the

Bruce M. Botelho
Attorney General
Re: Anchorage Coastal Trail Planning

January 17, 2001
Page 10

legislature by law." The legislative history makes it clear that the major aim of this bill was to require legislative approval of coastal trail construction. The bill was vetoed.

- B. The Department of Transportation and Public Facilities can condemn private land within the Anchorage Coastal Wildlife Refuge to construct a coastal trail as a federally-funded transportation project.

The first sentence of AS 16.20.031(e) prohibits the state and the municipality from acquiring land within the refuge by eminent domain for inclusion in the refuge. This sentence applies specifically to acquisitions for inclusion within the refuge. Decision Memorandum #57 and Senator Fischer's request that the recommendations in that memorandum be included in the bill indicate that the specificity was intentional. This sentence does not prohibit acquisitions by eminent domain for other purposes.

The second sentence of AS 16.20.031(e) allows the Department of Fish and Game and the municipality to acquire land by purchase, exchange or otherwise, but not by eminent domain. Whatever the extent of municipal powers under this clause, the linguistic switch from "the state" in the first sentence of AS 16.20.031(e) to "the Department of Fish and Game" in the second sentence appears to be a further effort to specify that acquisitions by eminent domain for non-refuge purposes are not prohibited. This sentence does not prohibit the use of eminent domain by departments other than Fish and Game. AS 16.20.031(e) does not prohibit acquisition of a coastal trail easement across private properties within the refuge by the Department of Transportation and Public Facilities so that it can construct a federally-funded transportation project.

- C. Land acquired by the Department of Transportation and Public Facilities through condemnation for a coastal trail project does not become refuge land.

The state and municipality are prohibited from acquiring privately owned land within the refuge "by eminent domain for inclusion within the Anchorage Coastal Wildlife Refuge." AS 16.20.031(e). Thus, the Legislature intended, and stated, that the refuge may not be expanded through the use of the eminent domain power by the state, including all of its various agencies, or by the municipality. If this specific prohibition is to be given its intended meaning and effect, we think the appropriate interpretation is that if private land within the refuge boundaries is acquired by the state through use of the eminent domain power, even though that land becomes "state-owned" land, as that term is used in the refuge description, AS 16.20.031(a), the land does not thereby become refuge land. A contrary interpretation would circumvent the prohibition.

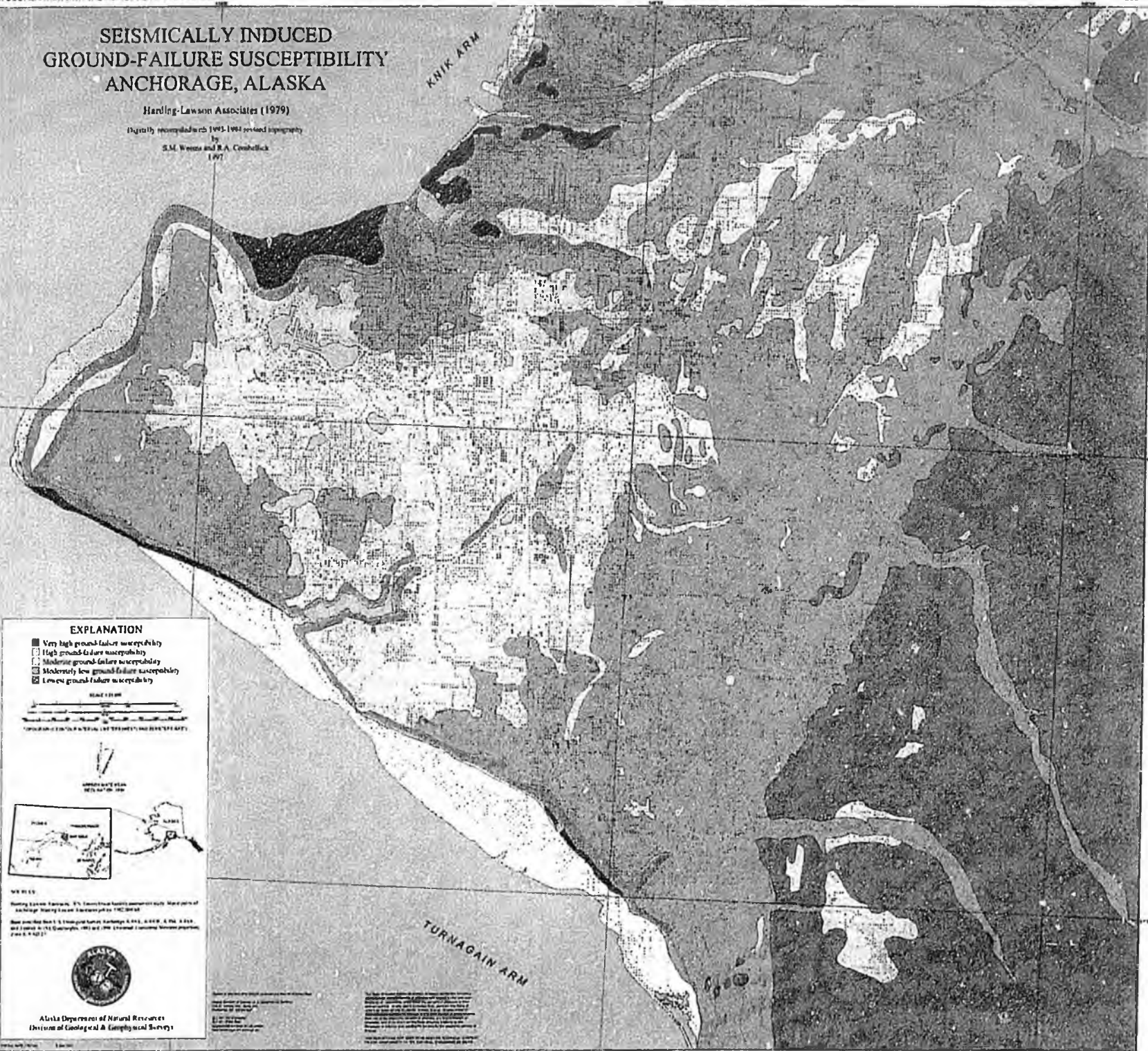
JEC/bap

SEISMICALLY INDUCED GROUND-FAILURE SUSCEPTIBILITY ANCHORAGE, ALASKA

Harding-Lawson Associates (1979)

Digitally recompiled to US 1983 revised topography

by
S.M. Weems and R.A. Combelluck
1997



EXPLANATION

- Very high ground-failure susceptibility
- High ground-failure susceptibility
- Moderate ground-failure susceptibility
- Moderately low ground-failure susceptibility
- Low ground-failure susceptibility

SCALE 1:50,000

VERTICAL DATUM: NAVD 83

US 1000

Harding-Lawson Associates, 875 East Franklin Avenue, Anchorage, Alaska 99503
Digitally recompiled to US 1983 revised topography by S.M. Weems and R.A. Combelluck, 1997

Base compiled from U.S. Geological Survey maps: 6001, 6002, 6003, 6004, 6005, and 6006 at 1:50,000 scale, 1963 and 1964. Unpublished 1:50,000 scale maps of 1963 and 1964.

Alaska Department of Natural Resources
Division of Geological & Geophysical Surveys

Michael
19800
Stolle
JARV,
DR.
Anchorage,
AK 99515

RECEIVED BY
MAR 4 - 2003

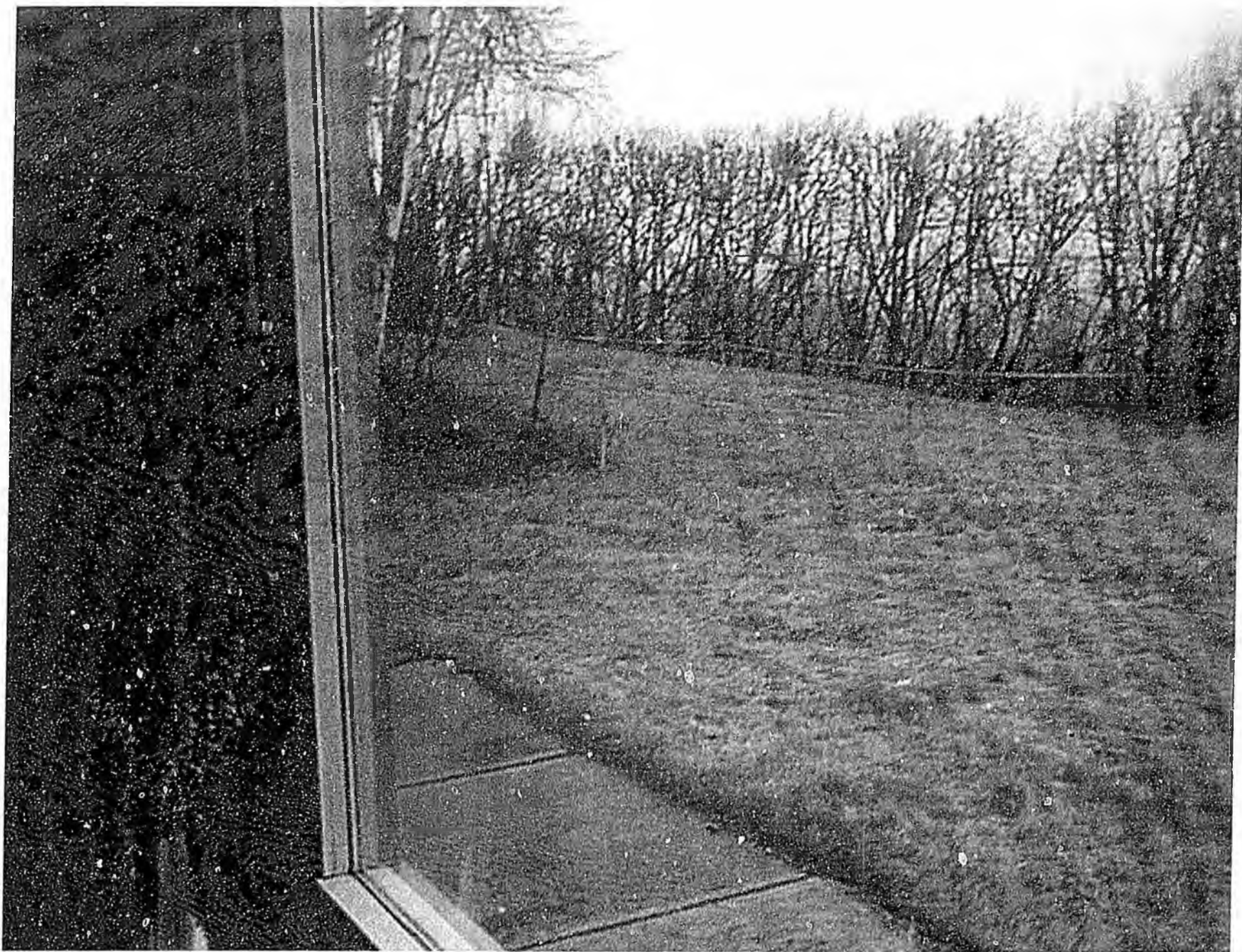
Proposed "Orange Modified" - 14 ft from bluff - "Trail" marked by Tape



View from lower deck - sliding door access

Sean Stolle
14020 SARVI DR.

Anchorage, AK 99515-



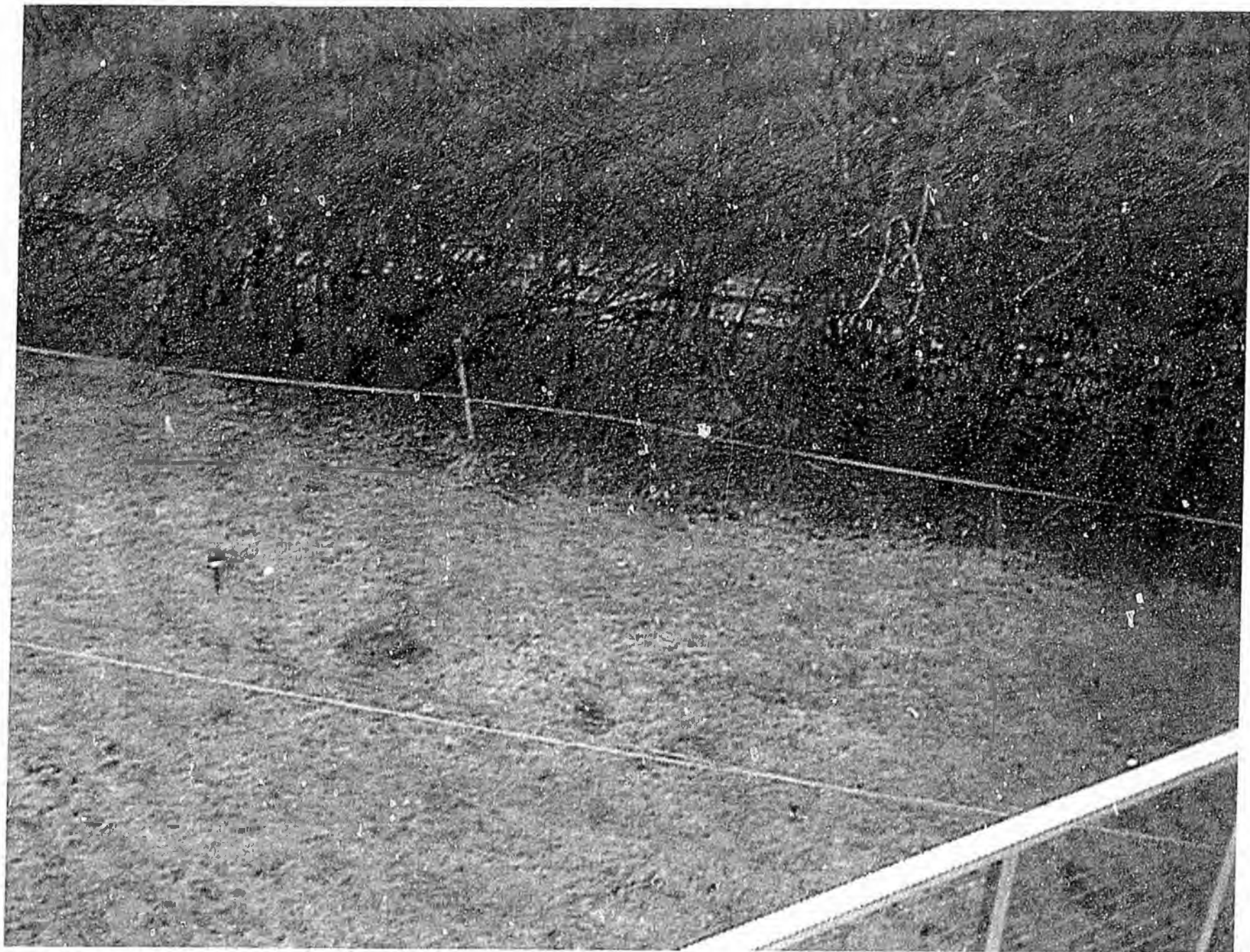
"Trail"

View from downtown/bedroom window



"Trail"

backyard & dog's pen

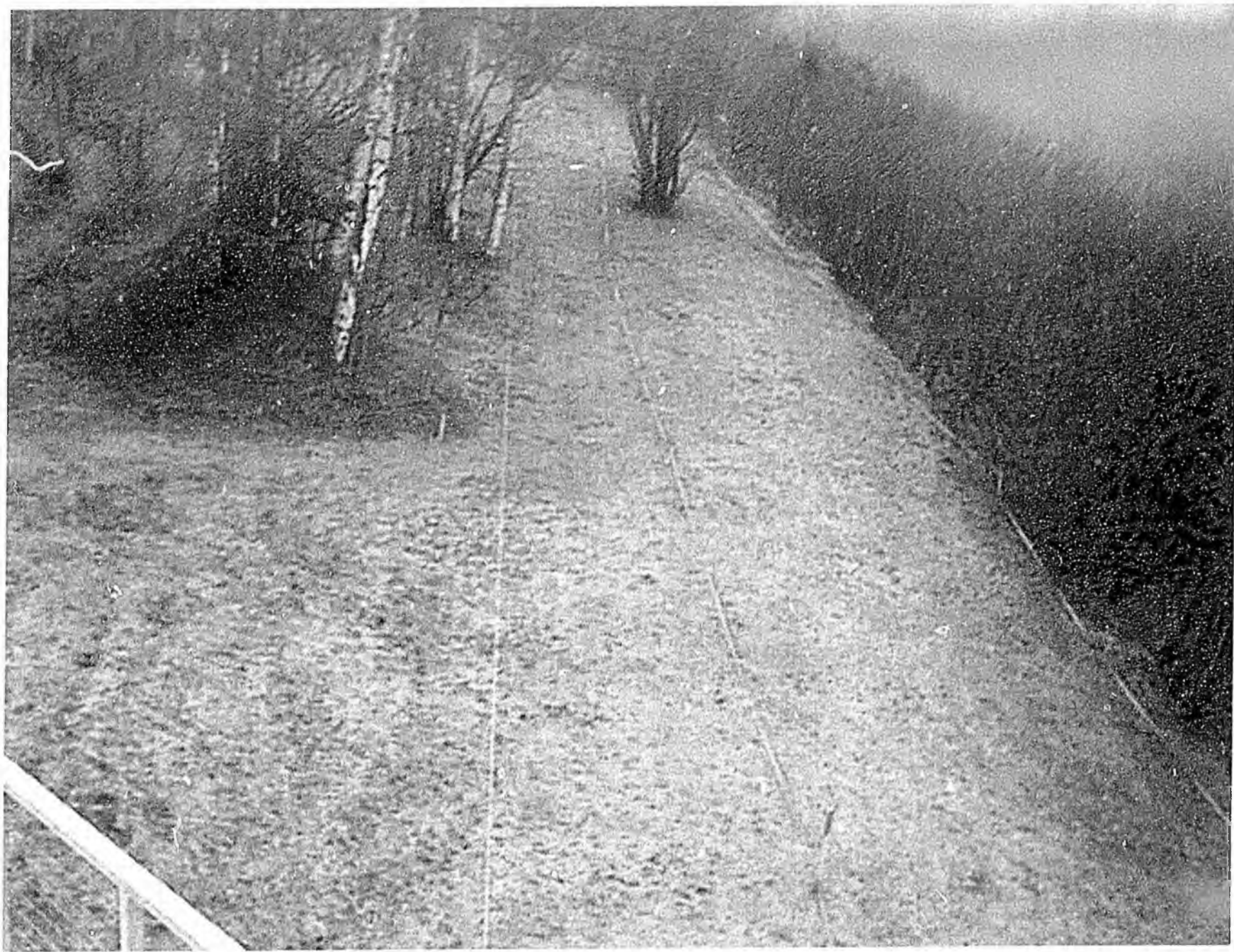


"Trail"

View from 2nd deck - "trail" below



2nd deck - "Trail" below



"Trail" across
backyard along bluff



Tracks below.

Business.
affid. purchased, secured
informal of Mr. Dickson home.
w/hold!

Process flawed

as property owner whose property would be taken - never contacted +
att. has deed document in file re: easement - litigation for - Court
trial below. + State, federal + Mo. 6 177
Property is now
on hold
Court all court held.



Tracks

wildlife eat and access refuge
below bluff

Their route crosses proposed "trail"

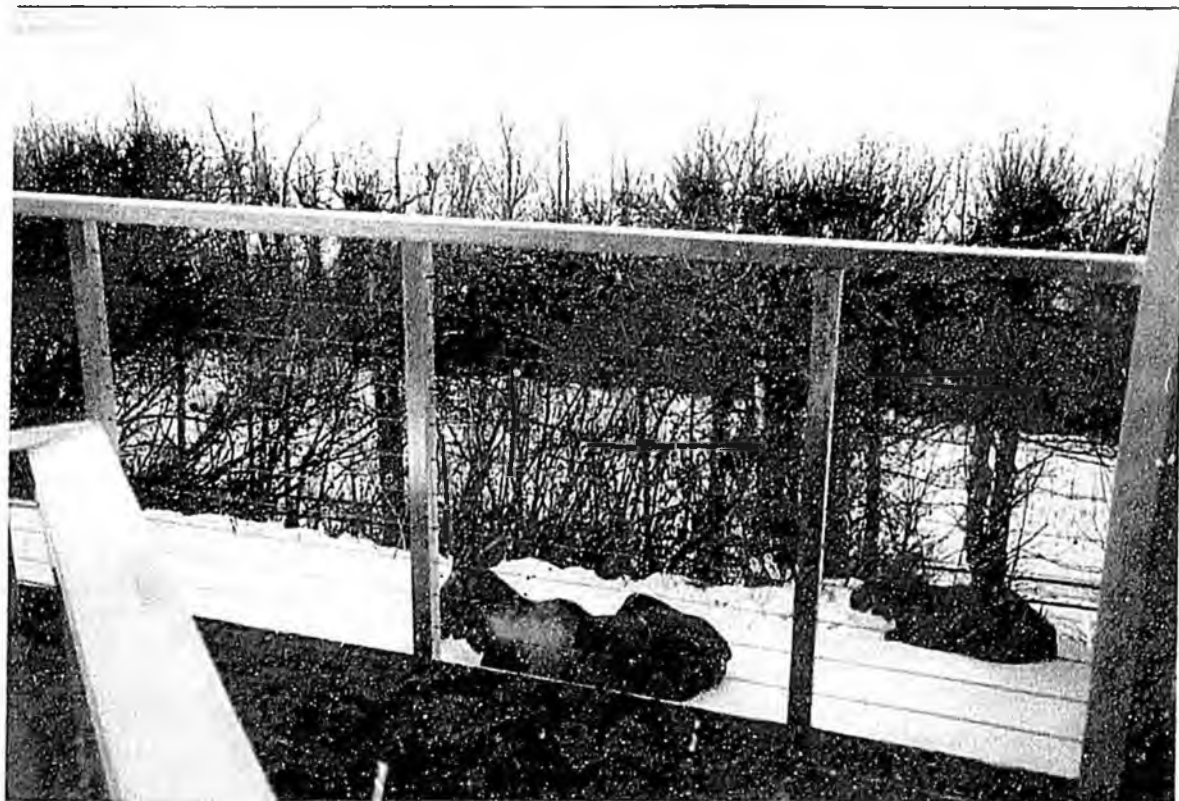
Joan Stolle

14020 JARVI DR.

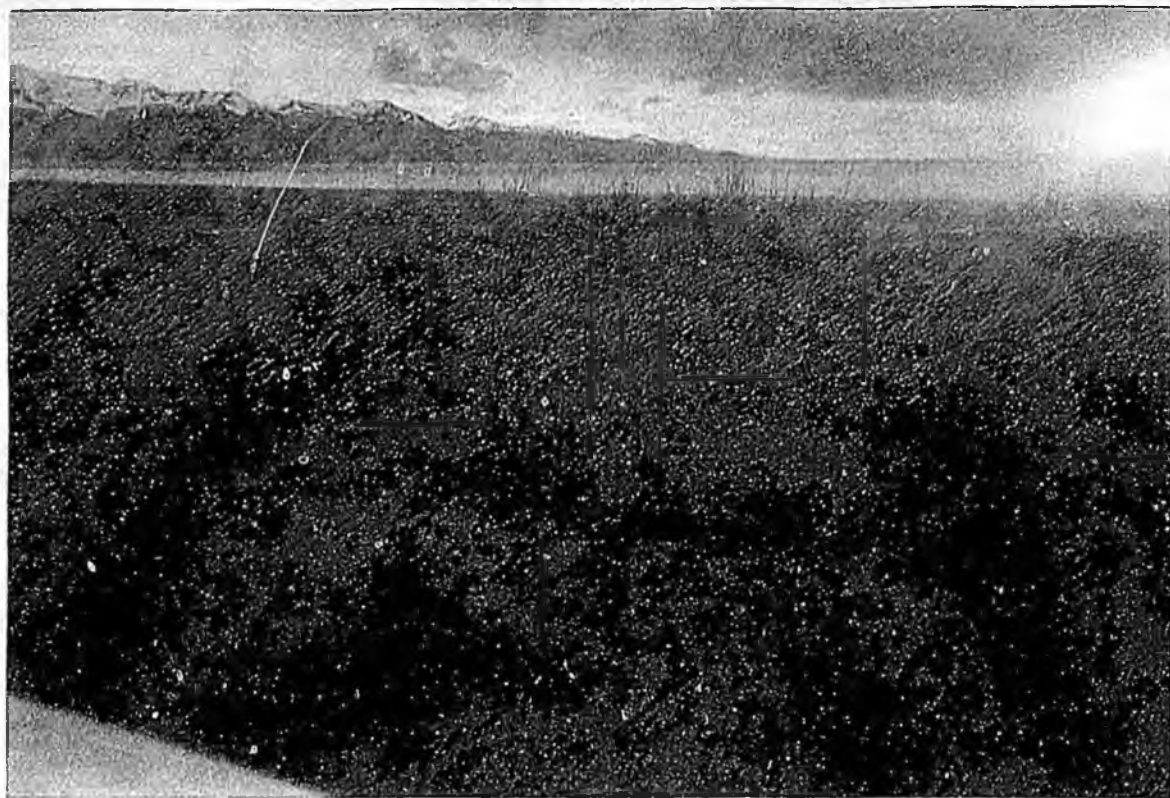
Anchorage, AK
99515



Wildlife escape train traffic
below bluff from Refuge
across proposed "trail"



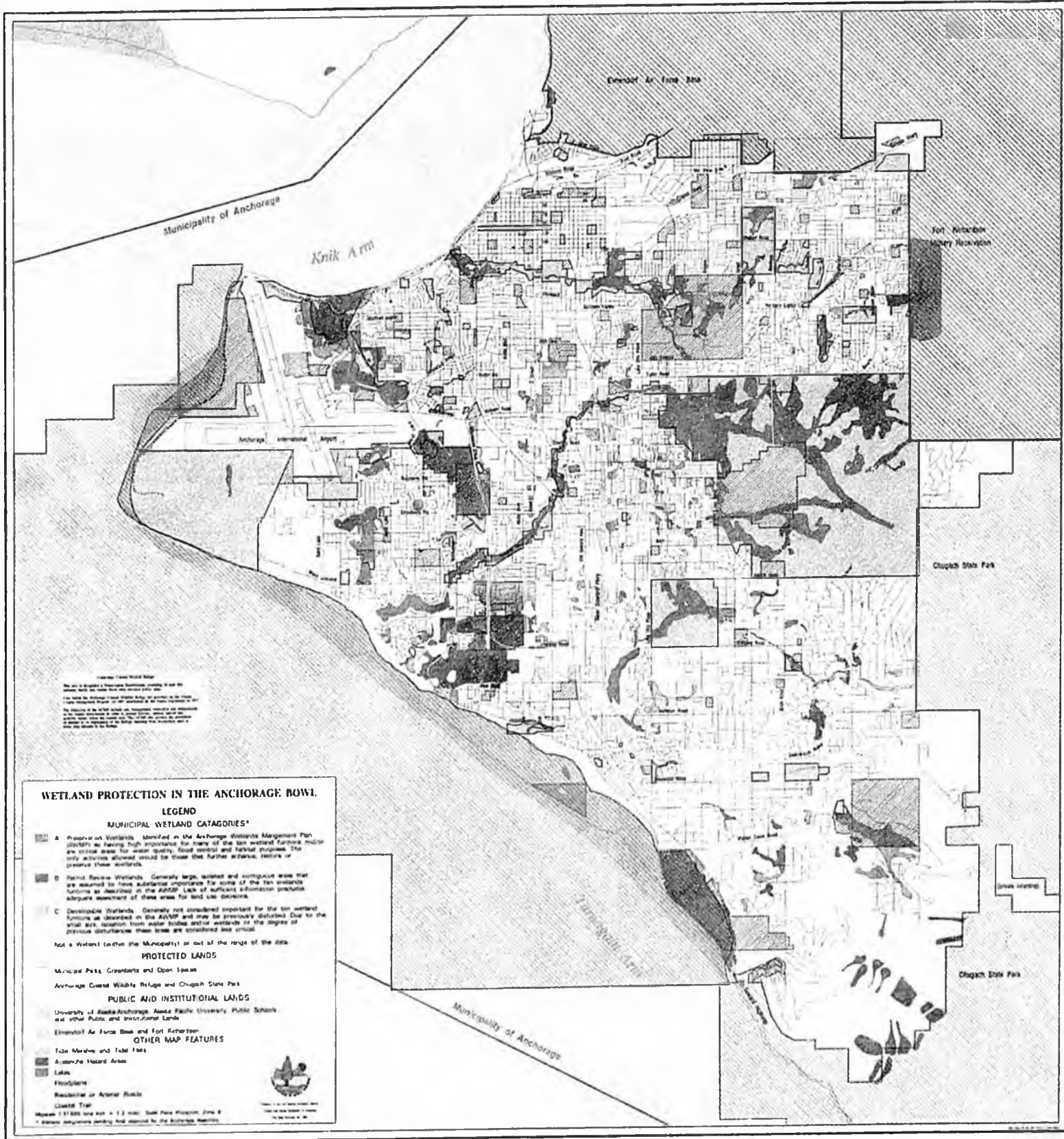
Wildlife rest where proposed
"trail" will be



Wildlife
nest

(Summer)










WETLAND PROTECTION IN THE ANCHORAGE BOWL

LEGEND



MUNICIPAL WETLAND CATEGORIES*

-  A Preservation Wetlands. Identified in the Anchorage Wetlands Management Plan (AWMP) as having high importance for many of the ten wetland functions and/or are critical areas for water quality, flood control and habitat purposes. The only activities allowed would be those that further enhance, restore or preserve these wetlands.
-  B Permit Review Wetlands. Generally large, isolated and contiguous areas that are assumed to have substantial importance for some of the ten wetland functions as described in the AWMP. Lack of sufficient information precludes adequate assessment of these areas for land use decisions.
-  C Developable Wetlands. Generally not considered important for the ten wetland functions as described in the AWMP and may be previously disturbed. Due to the small size, isolation from water bodies and/or wetlands or the degree of previous disturbance, these areas are considered less critical.
-  Not a Wetland (within the Municipality) or out of the range of the data.







PROTECTED LANDS

-  Municipal Parks, Greenbelts and Open Spaces
-  Anchorage Coastal Wildlife Refuge and Chugach State Park

PUBLIC AND INSTITUTIONAL LANDS

-  University of Alaska Anchorage, Alaska Pacific University, Public Schools and other Public and Institutional Lands
-  Elmendorf Air Force Base and Fort Richardson

OTHER MAP FEATURES

-  Tidal Marshes and Tidal Flats
-  Avalanche Hazard Areas
-  Lakes
-  Floodplains
-  Residential or Arterial Rights
-  Coastal Trail

Scale: 1:31,600 (not Incl. - 1/2 Mile) State Plane Projection, Zone 8

* Wetland designations pending final approval by the Anchorage Assembly



PLANNED BY: JAY BIRD, VICTOR BIRD
DESIGNED AND DRAWN BY: VICTOR BIRD
FOR USE BY: APRIL 1988

Anchorage Coastal Wildlife Refuge

This area is designated a Preservation Environment, consisting of tidal flat, saltwater marsh, and coastal flood zone resource policy units.

Uses within the Anchorage Coastal Wildlife Refuge are governed by the Alaska Coastal Management Program (ACMP) established by the Alaska Legislature in 1977.

The objectives of the ACMP include use, management, restoration and enhancement of the coastal environment in order to protect historic, cultural, natural and aesthetic values within the coastal area. The ACMP also governs the prevention of damage to or degradation of the Refuge resulting from inconsistent land or water uses adjacent to the Refuge.

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number: _____
Bill Version: SB23
() Publish Date: _____

Revision Date/Time (Note if correction): _____ Dept. Affected: DOT&PF
Title An Act relating to public rights-of-way and easements for surface transportation BRU Administration and Support
Component Commissioner's Office
Sponsor B Stevens
Requester STRA Component No. 530

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation, unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES	***	***	***	***	***	***
-----------------------------	-----	-----	-----	-----	-----	-----

CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2003) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)
*** The environmental document approval for the south coastal trail extension project is the only current project that could be affected by this legislation. That project is already subject to the "Section 4(f)" provisions addressed in 23 CFR 771.135. Section 4(f) sets an extraordinarily high standard for placing the trail within the ACWR including a determination that "there is no feasible and prudent alternative to the use of land from the property." Due to the 4(f) provision, the possibility of a trail being placed within the refuge is highly unlikely. Therefore, this legislation will likely have no affect on the project or the department's capital or operating budget.

Prepared by: Dennis R. Poshard Phone 465-3900
Division Special Assistant to Commissioner Date/Time 3/4/03 10:48 AM
Approved by: Commissioner Mike Barton Date 3/4/2003
Agency Alaska Department of Transportation and Public Facilities