

WATER

QUALITY

HEARING

Senate Health, Education and Social Services Committee
Hearing - January 4, 1985
1:00 pm - 3:50 pm

RE: Water Quality in Anchorage Creeks

Legislators Present:

Senator Joe Josephson, Chair, Senate HESS
Senator Vic Fischer, Member, Senate HESS
Senator Rick Halford, Member, Senate HESS
Senator Paul Fischer, Member, Senate HESS

Representative-Elect Pat Pourchot

0 Senator Josephson commenced the hearing at 1:00 pm.

1 Bill Lamoreaux, Regional Supervisor, Southcentral Region,
Alaska Department of Environmental Conservation:
It came to our attention in the fall of 1984 that there was
an existing pollution problem in some of the Anchorage
streams. This problem was identified in a report that was
done by our Juneau office. Problems are in Fish Creek,
Campbell Creek, Chester Creek and Little Campbell Creek. We
are concerned with these findings, if the condition in these
streams have gone on for some time and have gone unnoticed.
Our report started in 1981 and was completed in 1984. We
share responsibility with Municipality of Anchorage
Department of Health and Environmental Protection and have
been working closely with them to identify what steps need
to be taken to further clarify the degree of pollution
problem that exists and to identify what the sources may be,
as well as solutions to the problems. The degree of risk to
public health, I think, can be fully evaluated and
determined yet. Anchorage is a growing community, and the
urbanization of the city is a contributing factor.

To be realistic, if we could put our finger on the
existing source that causes some of the problems, we'd take
care of it today. Not just Eagle River but any of the
potential sources. The fact is, we don't know what these
sources are. A crack or a failing sewer line can go
undetected literally for years. And it's only through
intensified sampling can you even start to identify where
these sources are at. They're not readily visible.

- 10 Bruce Erickson, Alaska Department of Environmental Conservation:

The report which identified this did not specify a health hazard per say. The data does not in itself give a degree of risk or health hazard. We are trying to determine if human contamination or sewage is causing part of the problem.

- 20 Josephson: Do you have a work program over the next several years to address this issue?

Lamoreaux: Through our lab facilities in Juneau each year, we try to scope what our needs are for the particular regions and we put in requests for studies. One of the projects that has been on the list is to look at some of the lakes in Wasilla. This year, we have a lab request to have additional testing work to be done on some of the Anchorage streams.

I think, realistically, every effort is going to be made by both our department and the municipal department to try to confirm whether or not these streams have to be restricted for use. But it's going to take a larger effort to identify where these pollution sources are and to do something about it. And that's the effort that's going on now.

- 25 Robby Robinson, Manager, Environmental Health Division, Municipality of Anchorage Department of Health:

The Division is extremely concerned with the possible water degradation that was brought to the surface and really hit us in the face, so to speak, last summer. We are also concerned with the shallow subsurface water table (ground water) which is affected almost directly by on site septic systems. That in turn, can have an adverse effect upon the streams. We know, for a fact, that there has been some degradation of this shallow water system, the ground water system.

We have a two-fold attack. First, get a group of professional people together - the attempt of this group is to address the problem of the stream degradation. Second, to pinpoint, identify the probable source areas of pollution. Third, develop a program to minimize or control the problem. We have to either eliminate or control the source, to bring it into an acceptable level. I think we can do this. For example, if we studied ten streams and six lakes during 1985, run four series of tests on them, analyze them - this will cost \$525,000. Very frankly and bluntly, the Municipality doesn't have this money. With DEC's present arrangement, they don't have this kind of

money to do it. We have asked USGS if they have sources of money we could draw on, and several other departments. We need more money to solve the problem. We need to initiate an ongoing program, year and year out, so we can monitor this problem, with the major expense during the first year of this program.

35 Josephson: Can you give me some kind of report as to the cost for this kind of program for the next three to four years?

Robinson: Yes, I think I can give that kind of projection. (This cost estimate was received at a later date and is attached.) This would be projecting a middle ground situation (not the worst scenario, nor the least).

Josephson: Does the MOA Department of Health have any indication that there has been human health symptoms?

Robinson: No. We do have some loud warning symptoms now, if we don't heed them, I don't think I could tell you the same.

36 Jim Richardson, Past President, Knik Kanoers and Kayakers: Our group has been very concerned with these water quality problems. I am surprised to hear these people in the agencies who are responsible for monitoring water conditions that affect public safety, be amazed about this new problem that they were unaware of. It's not a new problem. The streams our group uses mostly are Eagle River and Campbell Creek. These two rivers are the highest used paddle rivers in the state of Alaska. We have talked to Mayor Knowles. He was interested in the problem but didn't have the responsibility for water quality. We've also talked to DEC and several legislators to help us find the problem. There hasn't been a water quality study of sufficient magnitude on Eagle River to tell us what the problem is. We have identified one of the sources, the Hiland Correctional Facility. When I went into DEC, I couldn't get any information on this facility. When they went through the files, the facility wasn't licensed, it had an old EPA permit. The awareness of the problem was not there and the knowledge of what the problem was was not there.

(Explanation was discussed regarding the facility and the permit from the audience.)

TAPE I - SIDE B

This facility has had a very poor history of operation. It seems to have a poor design. There's no reason that we feel, having had that, that you license it based on their enthusiasm to do a good job now. That just doesn't cut it. Regarding Chester Creek, just after the state spent alot of money using that as a high density inter-city park area, and you're telling people to use it, and now people are not being protected. The same situation exists and is going to exist on Eagle River. Look at the Eagle River Greenbelt Plan, all the money that will be spent on that.

I urge you to push to have the detail water quality analysis. We have identified one problem, it's a state problem. The solutions that have been proposed and the permit, which apparently has by now been issued, is a bandaid solution to a long term problem. The state should be looking a little longer to the future.

3 Josephson: Has your group identified other sources of problems?

Richardson: I can tell you three potentials. The MOA has a sewage treatment plant at Eagle River that dumps in 650,000 gallons of day of treated ----. Other areas are the development of the Southfork, which has alot of septic systems, and there's an old dump on the Hiland Road.

Our group has a race that we hold on Eagle River every year in July. Three people who went together down the river noticed odors from under the bridge and down several miles, three people in the group ended up with inner ear infections. They went to a doctor. Wondered if the cause was pollution from the river.

8 Mike Grijalva, Current President, Knik Kanoers and Kayakers: We see a great amount of increase in recreational use of all the rivers in the area, particularly in Eagle River. Explained about the club. Sees alot of debris in various rivers. I was surprised to hear the amount of money quoted that would be necessary to survey these ten rivers and five lakes. I find it difficult to believe that it would be that much money involved. I'm sure the Knik Kanoers would be more than willing to participate and do the sampling for free if we could get this initiated so we could improve the water quality.

14 Cliff Eames, Alaska Center for the Environment:
We coordinated the municipal clean up last year of Chester Creek in June and had, on a short notice, 200-300 participants who helped. The Anchorage Waterways Council recently formed an organization which has taken as its mission all of the creeks in Anchorage. Although at the present time, we're focusing primarily on Chester Creek, Fish Creek, Campbell Creek, and Little Campbell because they appear to us to be the ones most heavily used or centrally located or are the ones with the most obvious litter and water pollution problems. If we attempt to attack the litter problem, as well as the pollution problem, we'd do alot to make people aware of the overall problems of our creeks and green belts.

We haven't always preserved our green belts. We build wetlands near our creeks, closer than we should have, reducing the pollution cleanup function of our wetlands, creating additional erosion because the wetlands aren't absorbing some of our runoff. The Municipal plan to protect wetlands provides for the purchase of lands designated as preservation wetlands. The wetlands plan, from our standpoint, is a failure. One of the problems is that the preservations wetlands that were identified as those that should not be developed were intended to be purchased and of course the funds haven't been forthcoming to purchase those wetlands. We expect eventually they're going to be filled unless we come up with some other mechanism to save them or with the funds to purchase them. These, of course, have an impact on water quality. We have some solutions: an officially designated waterways cleanup day, funds for adequate studies of the creeks, a single years study isn't adequate (need continued monitoring). The Municipality has suggested that an intergovernmental task force be convened to look into the problem and they single out one or two major demonstration projects that would be highly visible and have a clear, positive impact on some of our water quality problems in Anchorage. We need to make Anchorage citizens aware of how serious this problem is.

27 Dr. M. P. Wennekens, Anchorage citizen:
Has been dealing with issues on fresh water and marine aquatic qualities. Hopes lakes will also be protected and looked into. (The lakes are the recipients of various streams.) Worried about aquatic system in the creeks. Air emissions and air pollution are problems.

31 The water quality standards are based on the use of waters. In the Anchorage bowl, the highest use classification of water is drinking water standards. This is the way all your waters in the Anchorage bowl are classified as. If you examine your drinking water standards

very carefully, there are three components that are very important in terms of protection of the quality of the waters. Organic, inorganic and physical chemical contaminants. If you go through the history of the standards, you'll find it was developed as for the protection of aquatic life.

40 Take a long hard look at the new EPA regulation for water quality standards, November 1983. It has strong language in it. It designates waters of state and national wildlife refuge and parks - outstanding national resources to be maintained and protected. Case in point, Potter Creek, under EPA regulations, it has to be given maximum level of protection to maintain the quality of its present level.

Alot of pollution control rests with land management control.

41 Mary Core, Alaska Center for the Environment:

A new study was released by the Department of Environmental Conservation that analyzed 45 potential hazardous waste sites in the State of Alaska. There were actually ninety names on the list and only 45 were examined because of the lack of funds. Of those 45, 12 are in Anchorage. Of those twelve, one is on the high priority list for further study and the rest are either on low or medium priority lists. The high priority problem is at the Alaska Railroad terminal next to Ship Creek, an old solid waste site is located there. The problem is no funding is available at this time to proceed with investigating what is actually at these sites and what the hazards are.

TAPE II - SIDE A

0 I'm concerned with DEC's budget on the water quality issue. The present budget, federal funds from EPA have been cut back, because EPA is critical of the way the state has managed the funds. Also part of that, our region is divided into four states and Tacoma, Washington has a critical problem. Thus, we're also being penalized because other states have higher profile problems. The DEC total budget, as proposed, is an increase over last year's budget. However, in the area of air quality and solid waste, they're actually not getting the increase the Department has requested.

MOA completed a study about a year ago that was an inventory of all businesses who might have a hazardous material that ends up in a hazardous waste product. It was a voluntary survey with a 43% response. Problem was there

was no money to follow up on this survey. However, there still is not a complete assessment of who is producing how much hazardous waste and where that waste is going.

10 Discussion between audience and panel.

17 If we could find out what was coming into the state that we knew was a hazardous material and would end up as a hazardous waste, at some point in the process, we'd have some tracking mechanism. That was the hope of SB 503.

23 Lee Pekrul, citizen:
Had some questions for the Committee, about level of chlorine at Elmendorf.

27 Kerry Conrad (?), Anchorage citizen:
Concerned about secondary treatment plants in Eagle River. No where have we been told that no commercial treatment, sewage treatment plants, removes viruses. It's estimated that as many as one half of all secondary treatment facility plants malfunction on occasion when solvents to toxic chemicals are dumped down sewers.

25% of coliform samples that USGS took during the 18 month period in 1980-82 exceeded state standards for contact recreation in Campbell. At Little Campbell Creek, 50% of the coliform samples exceeded the state standards for contact recreation. This report was published in mid 1983. In all likelihood, there is a great chance that the problem we have with Campbell Creek regarding coliform comes from the Anchorage Zoo. Little Campbell Creek goes right through the middle of the zoo. The zoo doesn't have a septic system there. High coliform counts have been discovered in Campbell Creek as early as 1981 by USGS. We need to discover if it is human or animal coliforms.

39 Senator Halford asked several questions to DEC employees regarding permits and overall plans.

Senator Halford: What has DEC done in terms of a pollution control plan, an overall plan for the Anchorage area?

DEC: I'm not aware of an overall plan, other than the work that we've done so far.

Senator Halford: It looks like the statutes require that DEC to have a water pollution control plan but I can't find it. With regards to nonhousehold users, the statutes also require that anyone having any kind of a discharge has to have a state permit?

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DEC: Correct.

Senator Halford: How does DEC relate to MOA with regards to functions. Do you have overriding state authority and responsibility and what has the municipality assumed of that?

DEC: There's several programs that the municipality is currently doing that we do otherwise in other parts of the state. One is the on site sewer disposal program. Another area is subdivision review. And plan review for sewer and water extensions to the municipal system is also now done by the municipality as opposed to being done by DEC.

TAPE II - SIDE B

0 DEC: The people that track the EPA grant money are in Jurcau. One of our big problems has been accountability, how account for what has been accomplished. We receive money in a multitude of programs from EPA.

Discussion ensued about Hiland permit, a control plan and other issues.

21 Senator Josephson: Adjourned the hearing at 3:50 pm.

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Robby Robinson	MGR ENVIRONMENTAL Health Division Dept of Health	"	X	
Keith BANDT	ENVIRONMENTAL ENGR. MGR Dept of Health	"		X
Christine Godfrey	EPA 701 C St, Box 19 Anchorage AK	271-5083		X
Jim Sweeney	Municipality of Anchorage Punch 6-650 Anch	564-1336		X
CRAIG BEWEN	6740 St James Pl Anch AK 99504	333-8199		
✓ Jim Richardson	Kate Knudsen & Associates 3561 E 20th Ave ANCH	279-2883		X
✓ MIKE GRIMALVA	UNIK KAMERS	279-3185		✓
✓ Theda Thelish	Anch			✓
SEN Fischer	1024 W. 6th Ave			✓
Sen Josephson		278-3654		✓
Sen Halford				✓
Steve Kadish	"	278-3654		
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Charles M. [unclear]

203 Swain Dr

274-0805

- Mary Core / Alaska EPA
Center for
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1069 W 6th

274-3621

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COST ESTIMATE

I. First Year Phase - Surface Water Degradation Study - Municipality of Anchorage

A. Basic design criteria and assumptions:

1. 12 streams will be sampled throughout the Municipality.
2. 10 sample points will be utilized on each stream.
3. Stream samples will be collected and tested 4 times during the year.
4. 6 lakes will be sampled throughout the Municipality.
5. 1 sample point will be utilized on each lake.
6. Lake samples will be collected and tested 4 times during the year.
7. At the time each sample (lake and stream) is collected, field tests will also be taken to determine the temperature, Ph, and conductivity of the sample at the time and place of sampling.

B. Cost estimates (annual):

1. Cost of sampling - streams		
12 streams x 10 samples x 4 times/yr. x \$50	=	\$ 24,000
2. Cost of testing - streams		
12 streams x 10 samples x 4 times/yr. x \$980	=	470,400
3. Cost of sampling - lakes		
6 lakes x 1 sample x 4 times/yr. x \$50	=	1,200
4. Cost of testing - lakes		
6 lakes x 1 sample x 4 times/yr. x \$980	=	23,520
5. Review test data, prepare charts and engineering report after each series of tests.		
4 times/yr. x 20 man hrs. x \$75/man hr.	=	<u>6,000</u>
Grand Total Cost		<u><u>\$525,120</u></u>

II. Subsequent Years

A. Basic design criteria and assumptions

1. 12 streams will be sampled throughout the Municipality.
2. 5 sample points will be utilized on each stream.
3. Stream samples will be collected and tested 2 times during the year.
4. 6 lakes will be sampled throughout the Municipality.
5. 1 sample point will be utilized on each lake.
6. Lake samples will be collected and tested 2 times during the year.
7. At the time each sample (lake and stream) is collected, field tests will also be taken to determine the temperature, Ph, and conductivity of the sample at the time and place of sampling.

B. Cost estimates (each subsequent year)

1. Cost of sampling - streams 12 streams x 5 samples x 2 times/yr. x \$50	=	\$ 6,000
2. Cost of testing - streams 12 streams x 5 samples x 2 times/yr. x \$980	=	117,600
3. Cost of sampling - lakes 6 lakes x 1 sample x 2 times/yr. x \$50	=	600
4. Cost of testing - lakes 6 lakes x 1 sample x 2 times/yr. x \$980	=	11,760
5. Review test data, prepare charts and engineering report after each series of tests. 2 times/yr. x 20 man hrs. x \$75/man hr.	=	<u>3,000</u>
Grand Total Cost		<u><u>\$138,960</u></u>

III. Mitigation and Restoration

The extent of the surface water degradation cannot be determined until the 1985 comprehensive sampling/testing program has been completed and the results analyzed. Once this information is available, firm recommendations can and will be made concerning the elimination or mitigation of the sources of degradation, and the restoration of the surface waters to an acceptable environmental quality level. The costs of the mitigation/restoration program will accompany the recommended action plan.

RR2/p/D12

Thede Tobish President
Anchorage Audubon Society

4 January 1985

To: Members of the Senate Health, Education, and Social Services Committee.

My name is Thede Tobish, I am President of the 1410 member Anchorage Audubon Society. Thank you for calling this public hearing today.

For years, Anchorage Audubon's major environmental concern has been habitat loss, and the persistent degradation of water and air quality within the Anchorage Bowl. Because of recent studies, released late in 1984, the public is now aware of the seriousness and complexity of our local stream pollution problem. The delta areas of most Anchorage streams are endangered because of this intense stream pollution. Several of these deltas are major wildlife habitats; we cannot afford to allow their demise into sterility, a distinct possibility for Fish Creek delta for instance.

Our approach to the specific problem of water quality has focused on an attempt to preserve the integrity of remaining riparian and wetland habitats which serve as filters and headwaters of local streams. Shortcomings in what originally was a valuable Municipal Wetlands Inventory plan have allowed for continued habitat loss, and, for instance, Fish Creek is now a vivid example of a stream lacking riparian wetlands and filtering habitats. Wetland and riparian development must be placed out.

For our part, Anchorage Audubon has continued to monitor and testify when appropriate, on land development and fill. We have also begun an Urban Habitat Project that aims at education of local developers and landowners; that future development and property manipulation would be environmentally compatible but not an economic burden.

We feel that the most valuable method for protection of water quality and related riparian communities is three-fold; restricting habitat loss, strategic wetlands preservation, and better enforcement of agency regulations and standards. Future development within watershed boundaries must reflect these three parameters simultaneously to effectively ensure water quality. To identify pollution sources alone would not be sufficient in the long term. Again Fish Creek would be an example of this.

We would request from this Senate Committee that a city-wide Urban Stream or Watershed Act be introduced. This legislation would fund a citywide water quality monitoring and facility agency cooperation in developing operational and financial planning for the entire watershed. These plans would systematically identify stream pollution sources and prescribe corrective measures; it would identify vital wetland and riparian habitats and oversee their preservation of conservative development. We would like to see the state, federal, and municipal agencies in a working cooperative way where they are not now. We would like to see wetland development or stream water quality enforcement, for instance. We would hope that funding for this Urban Stream legislation could continue to come from the Central Funds, as smaller amounts for related projects already come now. We will give up to millions in funding for Sustina when all of the urban streams in the area are seriously and permanently threatened. It seems that statewide legislation is necessary to intrarelate agencies' roles and functions and to standardize local ordinances aimed at water quality. If legislation of this type were introduced you would have full support of Anchorage Audubon's 1410 members.

Thank you for this opportunity to present our concerns and ideas.

Thede Tobish
Thede Tobish

Anchorage water pollution no health problem — yet

The Associated Press

Health officials say no human health problems have resulted from the pollution of Anchorage creeks and lakes — yet.

"We do have some very loud warning signals," said Robby Robinson, manager of the municipality's Environmental Health Division. "And if we don't heed them, I don't think I can tell you the same thing (at a later date)."

Robinson made the comments at a hearing

Friday before the Senate Health, Education and Social Service Committee. The information will be used in upcoming budgetary considerations, according to Sen. Joe Josephson, D-Anchorage, who chaired the hearing. About 20 people attended.

Robinson estimates it will cost \$525,000 to test 10 local streams and six lakes over a year. He said neither the city nor the state can afford such a program without help from the legislature.

The city health division's budget for water analysis is \$15,000, Robinson said. A single test can cost between \$1,200 and \$2,000.

Jim Richardson, a spokesman for the Knik Canoers and Kayakers, said 84 of its some 350 members have reported health problems after boating on local waters.

Those treated for inner ear infections were told by their doctors that polluted waters were a likely culprit, he said.