



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

109235

*[Handwritten signature]*

COMMUNITY AND ECONOMIC  
DEVELOPMENT DIVISION



B-166506

109235

APRIL 30, 1979

The Honorable Warren G. Magnuson  
United States Senate

Dear Senator Magnuson:

*DLG01460*

This letter summarizes the information we obtained to answer your January 25, 1979, request for a review of the Eastsound Concerned Citizens Committee's allegations concerning the sewer project in Eastsound, Washington. We have included information on two letters from the committee dated November 27, 1978, and January 23, 1979. The committee made several allegations questioning the (1) need for a sewer project in Eastsound, Washington, and (2) the procedures followed by the Environmental Protection Agency (EPA) and the State which allowed funding for the project.

The information we obtained generally substantiated these allegations. We found no evidence to support the State's priority rating of this sewer system. The need for a large part of the system is questionable, and according to EPA-proposed guidelines, the costs of the system are excessive. The system will have an adverse impact on low-income groups in the community, primarily the elderly.

Because of your interest, continued concern by Eastsound citizens, and our discussions with project officials, EPA *DLG01461* region X representatives will reexamine the present project's design and scope through a private consultant. EPA and the consultant will discuss that study and changes in sewer plans, if any, with Eastsound residents.

DESCRIPTION OF EASTSOUND PROJECT

Eastsound is a small, unincorporated community located on Orcas Island in the San Juan Island cluster. The San Juan Islands are located in Puget Sound at the northwest corner of the State. They are accessible by the Washington State Ferry System, private boats, and airplanes. The islands are rural

*Letter Report*  
*005124*

CED-79-81  
(087090)

in character, with settlements of shops and restaurants forming commercial centers such as Eastsound. The San Juan Islands are used primarily for recreation and they support large numbers of tourists who use the resort and park facilities. Orcas Island has a high seasonal population influx of tourists and summer residents.

Orcas Island residents currently use individual septic systems for sewage disposal. The planned Eastsound sewer system consists of pressure sewer collectors and interceptors, a secondary treatment plant, and a marine outfall for the treated effluent. Project statistics are presented below.

Plant size	80,000 gallons per day
Population of Eastsound sewer district	385
Business and residential buildings (expected connections)	188
Total assessed valuation of all taxable property in Eastsound	\$9,670,506
Total capital cost of project	1,663,300
Average capital cost per connection	8,847
Median value of homes--San Juan County (note a)	23,500
Median income--San Juan County (note a)	8,420

a/Source: 1970 U.S. Census.

SCOPE OF OUR ANALYSIS

We reviewed available file information and discussed the allegations with regional EPA officials, State Department of Ecology and Department of Social and Health Services officials, and representatives of Eastsound's Concerned Citizens Committee. We met with the San Juan County sanitarian; reviewed his information concerning Eastsound; and toured the Eastsound Sanitary District with him, discussing soil conditions and present sewage disposal problems. We also discussed the allegations with the San Juan County assessor and auditor and reviewed their files on Eastsound. EPA officials in Seattle and the consulting engineer for the Eastsound project also provided information to us.

*DLG/AM/2*

ALLEGATIONS AND RESPONSES

The major allegations made in the two letters and the information we obtained follow.

Allegation

--"Why was the Eastsound sewer project rated as it was by the state using a system approved by EPA? There is no evidence to support the rating.

"(a) What need has been shown for a sewer?

"(b) What tests were made of alleged failing systems--visual, dye test, bacteriological test?

"(c) Toxicity and coliform excess are alleged to be problems according to the Construction Grants Program rating sheet as prepared by the Department of Ecology. There is no evidence to support the rating given.

--"The rating sheet further alleges the water supply source is being contaminated by raw sewage or septic tank effluent. Monthly tests made in accordance with state law fail to show any contamination whatsoever."

Response

The allegations are basically accurate. We found no evidence to support the State's rating of the Eastsound project. State officials told us they did not use objective testing, such as dye and bacteriological tests, when assigning points that permitted Eastsound to receive a State rating high enough to receive Federal grant funds.

State officials and the consulting engineer told us they relied on letters expressing concern over sewage disposal problems in Eastsound from the county health officer and the county sanitarian to support a need for the Eastsound sewer project. The county health officer and the county sanitarian told us they did not conduct objective tests to verify sewage disposal problems, and our examination of their records disclosed no testing documentation.

To determine if the drinking water aquifers were being contaminated by sewage, we discussed the results of Eastsound drinking water tests with Washington Department of Social and Health Services (DSHS) officials. We also reviewed its records for 1976-79 and found little evidence exists to indicate that the water supply is being contaminated by sewage. State water quality standards were met in all months except November and December 1977. The source of contamination in

those months was unknown, and later tests showed no recurrence of the problem. DSHS officials confirmed these findings.

EPA region X officials said they did not verify the alleged problems leading to Eastsound's rating. They explained that the region is responsible for reviewing the State's overall rating system but is not responsible for reviewing individual projects on the priority list. They explained that parts of the State priority system are subjective.

#### Allegation

--"In a survey of the area made by the County Sanitarian in January 1979 north of High School Road, there were two failing septic systems. This survey was during a period of high rainfall when systems would normally malfunction and seems to refute the contention of \* \* \* Engineers that the soil won't support on site disposal systems and a sewer is needed to correct the problems. The sewer system is needed by persons seeking development of land to support future growth, not the existing residents. Sewers are not needed north of High School Road and cannot be justified other than for development."

#### Response

We made no attempt to determine if the sewer system is needed by persons seeking to develop vacant land. The need for a system north of High School Road appears to be questionable according to the San Juan County sanitarian with whom we toured the Eastsound Sewer District. We did not conduct dye or bacteriological tests. The sanitarian said that the soil north of High School Road appeared to be supporting the septic systems. He pointed out only two failing septic systems north of High School Road. He believed one of these could be corrected by installing a new drainfield and the other could not be corrected because of the small lot size. The sanitarian showed us some vacant land in low areas north of High School Road that he believed would not support onsite disposal but would need sewers before homes could be constructed.

#### Allegation

--"Most of the affected private residents are on fixed incomes and will be forced to pay for growth and development they do not want and cannot afford. This is being permitted by EPA and the State. Examples are

6.11 acres next to the airport (tax lot 271113007) assessed at \$39,500 paying \$811.10 for the sewer \* \* \* and (tax lot 271150511) lots 11-20 Giffens North Beach Addition (ten 100' x 120' lots) assessed at \$23,000 paying \$775 for the sewer assessment. Contrast these with homeowner's \* \* \* home and lot assessed at \$25,580 paying \$4,215.60 for the sewer and \* \* \* house and lot assessed at \$28,850 paying \$2,422 for the sewer. Use of a competent financial consultant (other than \* \* \* Engineers) and proper oversight by the EPA and State could have prevented such obvious inequities. Many other examples exist."

Response

We verified information concerning sewer assessments and land valuations with the county assessor and sewer district personnel. Using planned charges as of January 31, 1979, we found no discrepancies with the reported assessments. A new assessment schedule, however, was published in February 1979 and reflects the following changes. The assessment on the 6.11 acres was increased to \$1,156.83. The assessment on lots 11-20 was increased to \$949.25. The assessment to the first homeowner increased to \$4,368.95, and the assessment to the second homeowner increased to \$3,198.38.

The assessment formula is based on four elements--lot front footage on the sewer, total lot area, a basic lot charge for all properties upon which a residential or commercial structure has or can be built, and a sewer connection charge. The primary sewer cost differences between the unimproved and the improved lots are the front footage rate and the connection charge. (See enc. I)

The new sewer system does not front on unimproved property, and no buildings are on these properties requiring sewer service. Thus, the property owners did not pay the front footage or connection charges. Sewer district personnel explained, however, that any properties within the sewer district boundaries that are subsequently subdivided would probably pay uniform lot and connection charges when they connect with the system.

Although a front footage fee would not be charged for future hookups, these new sewer users would have to build a new collector line from their properties to the existing sewerline. The cost could exceed the planned front footage fee. So, although additional initial fees would be paid if the unimproved lots are developed, the fees are deferred.

Under the Utility Local Improvement District (ULID) system used for Eastsound, owners of larger tracts of land have a greater vote in deciding whether or not a ULID for a sewer is formed. This is a legal method of developing a ULID under Washington State law, which appears to provide a substantial advantage to persons who would like to develop vacant tracts of land. Sewer systems allow more concentrated building on the property, and the costly front footage and connection fees may be deferred until the property has been developed. An EPA region X official stated that this approach tends to benefit land developers more than homeowners.

We found that user charges and debt retirement cost to the homeowner affected by this project will average at least \$231 a year, or 2.74 percent of the \$8,420 <sup>1/</sup> median income in San Juan County. These costs are excessive according to EPA proposed guidelines, which indicate that user charges and debt retirement should normally fall within the \$120 to \$200 range.

The cost to the community will probably have the greatest impact on low-income groups, such as the elderly. In discussions at the Senior Services Center in Eastsound, the center director related that 18 to 20 senior citizen families, or 10 to 11 percent of the district's anticipated 188 sewer connections, would be hurt financially by the project. She said some older people probably will sell their homes or property because they do not want to leave it to their heirs with a lien on it.

We discussed the effect of the sewer with the two homeowners mentioned in the allegation. Both are in their 70s and drawing social security. Current average costs to maintain their septic systems is a maximum of about \$30 per year. The annual cost for operations and maintenance <sup>2/</sup> and debt retirement for these homeowners once the new sewer system is installed will be \$480 and \$382. Both homeowners expressed concern over the difficulty they will have paying these costs.

#### Allegation

--"We were told by our commissioners that EPA would only fund a gravity system or a pressure system and that is

---

<sup>1/</sup>Source: 1970 U.S. Census.

<sup>2/</sup>Monthly operations and maintenance fees were computed at \$9.50 a month.

why we had to have such a system. Even though in the entire area north of High School Road, onsite disposal is not only practical but probably more cost effective. The consultant did not adequately explore this and EPA and the State approved the plan with its shortcomings."

### Response

Before the Clean Water Act was amended in 1977, generally only conventional (gravity or pressure) systems were funded. Facility planning for Eastsound was completed in 1976, 1 year before the 1977 amendments which emphasized planning for low-cost alternative systems. EPA also told us that it now funds low-cost alternative systems and, as a result of continuing community concern, will review the feasibility of these systems in Eastsound. A General Accounting Office report entitled "Community-Managed Septic Systems--A Viable Alternative To Sewage Treatment Plants" (CED-78-168, Nov. 3, 1978) also addresses this issue.

### PLANNED STATE AND EPA ACTIONS

The November 27, 1978, letter from the Concerned Citizens Committee contains several allegations relating to State law or State procedure. In general, the allegations concern the Utility Local Improvement District (ULID) formation, public information regarding sewer district formation and the sewer bond election, public meetings, sewer district boundary changes, and inequities in user charges related to the present system. We discussed those allegations with an official in the State attorney general's office and with an official in the State auditor's office. They agreed to investigate the allegations during the State auditor's scheduled audit (after June 30, 1979) to insure that State laws were followed.

As a result of your interest, continued concern by citizens of Eastsound, and our discussions with project officials, EPA regional officials and State Department of Ecology representatives told us they will arrange a meeting with the Concerned Citizens Committee to answer specific questions and explain various features of the proposed project. After this meeting, EPA plans to (1) review the potential for incorporating low-cost individual systems (alternative systems) within the sewer district service area in accordance with 1977 amendments and current EPA policy and (2) determine if the present project design and scope are appropriate for Eastsound. EPA region X officials stated that the results of this study would be discussed with residents.

B-166506

We did not obtain written agency comments; however, we did discuss the matters presented in this letter with EPA region X officials and included their comments where appropriate.

We are incorporating information about the Eastsound project into our current nationwide review of the socio-economic impacts of pollution control laws and Federal regulations on small cities and towns.

We also received a request concerning the Eastsound project from Senator Henry M. Jackson and are sending a similar letter to him. Copies of this letter are being sent to the Administrator, Environmental Protection Agency, and will be made available to other interested parties who request them.

Sincerely yours,

A handwritten signature in cursive script that reads "Henry Eschwege".

Henry Eschwege  
Director

Enclosure

COMPARISON OF LOT CHARGES

	<u>Unimproved land</u>		<u>First</u>	<u>Second</u>
	<u>Lots 11-20</u>	<u>homeowner</u>	<u>homeowner</u>	<u>homeowner</u>
	<u>6.11 acres</u>	<u>(2.5 acres)</u>	<u>(2.06 acres)</u>	<u>(1.25 acres)</u>
Front footage fee (note a)	0	0	\$1,995.00	\$1,596.00
Planned area charge (note b)	\$351.33	\$143.75	118.45	71.88
Uniform lot charge (note c)	805.50	805.50	805.50	805.50
Connection charge (note d)	<u>0</u>	<u>0</u>	<u>1,450.00</u>	<u>725.00</u>
Total	<u>\$1,156.83</u>	<u>\$949.25</u>	<u>\$4,368.95</u>	<u>\$3,198.38</u>

a/ Front footage refers to the amount of sewerline running contiguous to a parcel that does or can provide service to the property. The front footage charge is \$2.85 per foot.

b/ The planned area charge is set in the assessment formula at \$57.50 per acre.

c/ The total assessable area of the ULID is 459 acres. The lot charge is a uniform assessment against all properties in the ULID upon which a residential or commercial structure has or can be constructed. Currently, 310 lots in the ULID will be assessed \$805.50 each.

d/ The connection charge is an assessment on each source of wastewater that will connect to the system. A single connection is an average monthly water demand of 5,000 gallons, which is the average residential use in Eastsound. If a business or residence has an average use of more than 5,000 gallons per month, an appropriate number of connection charges will be assessed. There are 273 equivalent connections in the service area which will be charged \$725 each.

A sewer district official estimated that the current cost of installing a new septic tank and drainfield ranges from \$1,200 to \$1,700.