Assembly

MINUTES OF MEETING - ENVIRONMENT AND PUBLIC RESOURCES COMMITTEE - 56TH ASSEMBLY SESSION - JANUARY 27, 1971

Present: Homer, Fry, Lowman, Ronzone, Bryan,

Dini, Getto

Absent: Olsen, Swackhamer

Others Present: Senator Coe Swobe, Wm. B. Layton, Jr. -

Treasurer-Manager of Tahoe City Public Utility

District

Chairman Homer called the meeting to order at 8:10 A.M. for the purpose of discussion of <u>S.J.R. 5</u> - Memorializes U.S. Forest Service to withhold approval of request to increase sewer effluent discharge into "Cinder Cone" area of Truckee River Basin.

Lowman moved that the proposed rules and regulation for the Committee on Environment and Public Resources be adopted with the change that it will take the majority of the full committee. Motion adopted by common consent. A copy of the Rules and Regulations for the Committee on Environment and Public Resources is attached hereto.

Chairman Homer said the committee had been requested to hold an emergency meeting to take action on $\underline{S.J.R.}$ 5 and requested that Senator Coe Swobe speak in the affirmative on the resolution.

Senator Swobe reported he had a declaration from Washoe County and Senator Dodge that the effluent discharged into the "Cinder Cone" area of the Truckee River Basin was damaging to the Truckee River source of domestic water supply as well as to fish and wildlife in Pyramid Lake and Lahontan Valley areas. He said the U.S. Forest Service had granted a temporary special-use permit for disposal of effluent within the Truckee Basin which granted use for disposal of 1,250,000 gallons of effluent until December 31, 1973. Now, California is requesting this to be extended and increased. The U.S. Forest Service is being pressured to take action and would like to have it determined by the water flow people of both California and Nevada whether or not this effluent discharged is damaging or detrimental. He submitted a letter from Ernest Gregory, Chief of Bureau of Environmental Health - Nevada, which is attached to these minutes and becomes a part thereof. Mr. Gregory requested that assurance be determined that optimum bacterial reduction is occurring in the "Cinder Cone" and that operational techniques of effluent application are such to preclude plugging of the formation before consideration is given for the expansion of the area or to an increase in the quantity of effluent to be applied. He said Mr. Gregory urged the endorsement by this committee of the resolution as the Forest Service is under pressure to increase this maximum flow.



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Chairman Homer asked Mr. William Layton of the Tahoe Public Utility District who oppose this resolution to speak on their behalf.

Assembly Committee on Environment and Public Resources

Mr. Layton read paragraph 41 which states the terms of their specialuse permit with the U.S. Forest Service. He also submitted the Tahoe City Public Utility District's reply to the U.S. Forest Service which is attached. He stated they had made formal application on October 30, 1970 for an increase and submitted all data to them concerning the use of the "Cinder Cone". He said the effluent is showing up in some springs which is where they want it instead of the basin itself. He said the quality of water coming out of the springs is absolutely free of contamination. They took monthly tests of the springs during the year and they showed little bacteria which they believe was introduced by deer and other wildlife of the area. He asked that the committee postpone a decision until engineers from the State of California could meet with them and better explain their findings. He said that people who are convinced that this effluent is contaminating the Truckee believe so because of lack of information. He said they could show their finding reveal that there should be no fear of contamination to the Truckee River

Mr. Getto asked if it had been tested for nitrates and phosphates and Mr. Layton replied, "no". He said that additional testing for a 12month period from their station 8 is being made to determine this. So far, chlorites are showing up but this is caused from leeching from septic tanks at Lake Tahoe.

Mr. Layton said they are 150,000 gallons over the use permit at this time. They are at the point where they cannot connect 3,400 homes which does not include new homes. These homes cannot be used if they are not hooked up to the sewage system by January 1, 1972. Even with the pipe construction now under way, they would not be able to take care of all 3,400 homes by January 1st and could possibly run short of hooking up to 700 homes. He said that hookups to homes in Eldorado County will not be completed between now and the end of this year, and will have to go into 1972. He said that buildings cannot be built on lots if an increase is not granted and they can be assessed for sewers.

Mr. Coe said the Forest Service feels there is enough capacity at present for effluent to take care of the situation. He said for the safety of the Truckee River, we must make sure that the Health Department has the facts so they can make recommendations to the Forest Service.

Mr. Layton said the Forest Service did deny an increase of use for new construction but did permit 2.8 million gallons for existing structures. Chairman Homer asked how much the increase would be for new construction and Mr. Layton said the increase would involve 2.5% per year.

Mr. Layton explained they haven't determined where they will put in their sewage treatment plant at present or whether the effluent can be backed into the Truckee Drainage Shed or back into Lassen.

Senator Swobe explained the urgency of the matter is because of the pressure on the Forest Service and Mr. Layton explained that they have a meeting with them on Monday.

Mr. Layton said there is 9 million dollars provided for a bid on the new trunk line but it still has to be determined where the treatment plant will be on the Truckee River. He said they cannot go to the Truckee River under their present quality water standards.

Bryan asked what the effect of an increase would be to the water resources. Mr. Layton replied it would be beyond 2.8 million gallons per day figured on a 5 million capacity to give 100% water quality and they only use about 75% during the year except for the weekend of Labor Day when it is at the maximum. They now go beyond the initial 1.25 million gallons and are asking it to be raised \$0.2.8 million gallons plus which would be more than to take care of the present needs.

Lowman said he would like to get additional information and opinions from engineers and the State Health Department and it was discussed that passing of this resolution would give the Forest Service time to act to secure further study to determine the effect of the requested increase. Bryan stated that since there is a conflict of opinion, this would "hold the line" until we get additional information.

Motion by Dini to do pass on 5.J.5, seconded by Fry and carried.

Meeting adjourned 9:00 A.M.

RULES OF COMMITTEE PROCEDURE

ORGANIZATION

At the regular meeting scheduled by Assembly leadership after opening of the Legislative Session, the committee chairman names a vice chairman and a clerk and proposes for committee consideration any desired rules not adopted by the Assembly. A quorum of the committee is a majority of its members. The quorum may transact business and a majority of the quorum may take action even if the actual member voting is a minority of the committee.

DUTIES OF OFFICERS

Principal duties of the chairman are to

- (1) Call the committee together at the regular appointed or any other appropriate time and place to transact committee business.
 - (2) Arrange for appropriate meeting notices
 - (3) Preside at committee meetings and put all questions
 - (4) Maintain order and decide questions of order
- (5) Require that minutes be kept of all committee proceedings and supervise clerical and legal activities for the committee
 - (6) Prepare agenda for committee meetings
 - (7) Prepare committee reports and submit them to the Assembly
- (8) Maintain custody and insure the security of bills, resolutions and other papers and documents referred or submitted to the committee and transmit them to the Chief Clerk of the Assembly within 48 hours of committee action.

In the absence of the chairman, the vice chairman of the committee has and exercises the powers, responsibilities, functions and duties of the chairman. In the absence of both the chairman and vice chairman, these powers and duties are vested in an acting chairman named by the majority floor leader unless an acting chairman has been previously selected by the chairman.

Under supervision of the committee chairman the clerk is responsible for keepi a complete record of committee proceedings including time and place of each meeting attendance and absence of members, names of all persons appearing before the committee and the names of persons, firms, corporations and associations they rep-

resent, the subjects or measures considered, actions taken by the committee, a record of individual voting, completed committee reports and for other duties specified by the chairman. Minutes are acted upon at the next regular meeting of the committee and are subject to correction and approval only by a majority of the quorum assembled except for the last meeting of the Legislative Session which approval may be by individual contact by the chairman. The clerk takes to each meeting or hearing sufficient copies of bills being considered, if available, for the use of all persons attending.

DUTIES OF MEMBERS

Committee members, including the chairman, may participate freely in committee discussions and debate, make and second motions and assert points of order and privilege, subject to rules of parliamentary procedure set forth in Mason's Manual of Legislative Procedure. In hearings and other formal proceedings, a committee member may question or comment to a witness through the committee chairman.

It is the duty of committee members to attend and participate in all committee meetings. If unable to do so, he should notify the chairman or clerk in advance, indicating where he can be reached if needed. Continued unexcused absences must be reported to Assembly leadership for action.

A member may resign from the committee by submitting his resignation in writing to the committee chairman.

No member of the committee may vote by proxy under any circumstances. No member may vote on a question in committee where his private right or interest, distinct from the public interest, is immediately concerned.

Disciplinary action against a committee member may be taken by the committee chairman in concert with the Speaker of the Assembly and the majority or minority floor leader, as appropriate.

COMMITTEE PROCEDURE

All committee meetings except those designated as "executive session" are open to the public and public hearings may be held on any matter before the committee. The chairman will schedule meetings and hearings each legislative day for at least the eighth day ahead. (For example: On Monday he will give to each committee member, post on a public bulletin board in Assembly Chambers and send by mail to those persons and organizations he believes interested an agenda of all matters to be considered by the committee on the following Monday.) Matters for consideration may be arranged systematically in order of importance, order of reference, order in which testimony is available or by other pre-arrangement. Measures may be considered out of order as the chairman finds necessary.

The chairman notifies in advance the introducers (in either Assembly or Senate) of bills to be considered by the committee of the time and place of consideration of the measure and offers them opportunity to testify. Witnesses with long testimor on matters before the committee may be encouraged to present their information in writing and make oral summary limited to five minutes before the committee.

Subcommittees made up of committee members may be appointed by the chairman to consider and report back on specific subjects or bills. Rules governing the committ govern also its subcommittees.

Decisions of the committee are made after witnesses have spoken, been questioned and are excused. Committee action is taken at a committee meeting actually assembled and by a majority of full committee membership present. A Minority report may be fil with the Chief Clerk of the Assembly at the same time the majority report is submitted. A minority report is signed by each dissenting member present when the vote was taken.

within 48 hours after committee action on any matter referred to it, the chairma must report this action to the Chief Clerk of the assembly. At any time prior to reporting of a matter back to the Assembly, the committee may reconsider its try a water of 1/3 of the Committee; previous action All official bills must be returned to the Chief Clerk of the Assembly at the time the chairman makes his report.

If the chairman fails to call a meeting upon request of a committee member, a majority of the committee may order a special meeting and in the absence of the chairman and vice chairman designate an acting chairman and conduct business, provided a quorum is present.

All minutes, records and documents in the possession of the committee and the chairman are filed with the Legislative Counsel immediately prior to adjournmen sine die.

PUBLIC HEARINGS

Provision is made for public hearings on important bills and other matters of high public interest in a place with adequate facilities for all who wish to attend Advance notice states time and place of the hearing and identifies subject matter under consideration. Sufficient copies of the bill and other printed matter to be considered are available for use of committee members and others attending. Present of a quorum of the committee is desirable but not required.

Public hearings are opened by the chairman who calls to order committee member and others attending promptly at the scheduled hour. He announces the bill number and title or other matter which is the subject of the hearing, and points out that applause is not permitted. If so requested by a committee member, he may read or summarize the bill or other matter under consideration or have it done.

After opening the hearing, the chairman inquires whether anyone present wishes to be heard in favor of the bill or other matter being considered. These persons rise in an order determined by the chairman, address the chair, furnish their names, addresses, firms or other organizations represented and then address the committee on the subject. As each completes his remarks the chairman gives committee members opportunity for questions. If any wish to use this opportunity, they address the chair for permission and then question the witness. The chairman maintains supervision of the questioning to avoid debate or argument between committee members and witnesses. Questions from other than committee members are not in order and are not allowed.

After all persons wishing to be heard in favor of the matter have been heard the chairman inquires whether there are those present wishing to be heard in opposition. Any such are heard in the same manner as the proponents with similar opportunity for questioning by committee members.

The chairman is especially careful throughout the hearings that he is fair and impartial to both sides as the cases are presented. When all have been heard, the chairman declares the public hearings closed on the matter before proceeding to other matters.

ON THE TEEN SCENE

with Cindy Ulrich

Someone do something

About our problems.

Someone stop air pollution --

But not until I have made enough subfur

For me to retire comfortably.

Stop water pollution,

But not until I have drained enough waste

To spare my business.

Stop inflation

But start somewhere else -- I have to

make my living.

Create more jobs,

But don't ask me to take on more employees.

Let's promote peace,

But don't make me send my son.

Let's love one another,

But don't make me

Give up my own wishes.

I'm all for improving the world --

Rut

Start with someone else.

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Jahoe City Public Utility District

P. O. Box 33

Tahoe City, California 95730

(916) 583-3796

January 8, 1971

Mr. H. E. Branagh Forest Supervisor Tahoe National Forest Nevada City, California 95959

Re: Our letter of 10-30-70 requesting an increase in use of the Cinder Cone Your letter of 12-21-70 answering our request

Dear Hank:

By means of this letter, we wish to respond to your answer to our request for increase of use of Forest Service land, commonly referred to as the Cinder Cone, for the disposal of effluent. Your decision, in essence, allows for an increase in use of the Cinder Cone for existing structures under certain conditions, but disallows the use of the Cinder Cone for any new construction. This action, obviously, has created a building moratorium on the North and West shores of Lake Tahoe. By removing the ability of an individual lot owner to use his lot as he had previously, to construct a home at any time of his choosing, you have tied our hands in financing any further construction of sewerage facilities at Lake Tahoe, and have hindered our ability to finance and construct the Regional Export Facilities along the Truckee River and in the Truckee Area. Attached is a map of the District which shows the projects which have been constructed or are under contract, and the 3 remaining projects for the sewering of the area from Tahoma to D. L. Bliss State Park (Sewer Assessment District No. 7).

Attached to this letter are the following documents:

- EXHIBIT A A letter from the Engineer for the District, R. H. Dewante, in which he responds to the 7 conditions which you have imposed for the increase of use of the Cinder Cone. Please note that it is our intention to comply with all 7 conditions at the earliest possible date and that Mr. Dewante has supplied certification in accordance with Paragraph 35 of the Use Permit.
- EXHIBIT B A legal opinion from Mr. Joe Hughes, of the law firm of Orrick, Rowley, Herrington & Sutcliffe, concerning our inability to carry on assessment district proceedings on two of the three projects, namely, Sewer Assessment District No. 6B and Sewer Assessment District No. 7, as a result of the decision by the Forest Service to disallow sewage in the Cinder Cone from new construction, thereby making the unimproved lots unusable. It would be illegal to place an assessment on a parcel of land that is not benefited by the assessment, and therefore, there is no way to finance these projects.
- EXHIBIT C A legal opinion from Paul Chamberlain, the Attorney for the District, concerning the legality of taxing the area of Meeks Bay-Rubicon Bay to finance West Shore Export Facilities-III. Please note that under certain conditions, it might be possible to proceed with this project.

Mr. H. E. Branagh January 8, 1971

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- EXHIBIT D A detailed analysis of the serious financial impact on our community as a result of the decision by the Forest Service to allow only the sewage from existing construction. Please note that the decision of the Forest Service has, in total, removed 40% to 50% of our ability to finance the Regional Export Facilities, which are estimated to cost \$25,000,000 to \$32,000,000. It is feared that we no longer have the financial ability to carry out the construction of the Regional Export Facilities.
- EXHIBIT E- A Resolution (No. 453) that the Board of Directors of the Tahoe City Public Utility District adopted on January 7, 1971 making two major changes in District policy concerning our ability to sewer the areas within our service area and showing our desire to proceed with the assessment districts for the sewering of Tahoma and the Meeks Bay-Rubicon Bay area provided that the Forest Service permits an increase in use of the Cinder Cone for new construction.

In view of the information submitted with this letter, and since we feel that you were not aware of the serious effects upon our community as a result of your decision, we urgently request that you review your position so as to allow a small but continued rate of growth in our community, consistent with the historical growth over the past 3 or 4 years. The growth to which we are referring would allow an approximate 9% annual growth in assessed valuation, with only a 2 1/2% annual increase in sewage flows.

Time is of the essence since we have already received an extremely favorable construction bid for Sewer Assessment District 6B. This bid is \$350,000 below the Engineer's Estimate, and expired on December 21, 1970. Fortunately, the successful contractor has extended his bid for 60 days to February 19, 1971. Since it will be necessary to call for new bids on the assessment bonds, we will need an answer to this request for use in the Cinder Cone for new construction by February 1, 1971.

Thanks very kindly for your consideration of this matter.

Sincerely,

TAHOE CITY PUBLIC UTILITY DISTRICT

William B. Layton,

Treasurer-Manager

WBL:ss

enc.

DES JUNE 1970_

RANDOLPH H. DEWANTE EDWIN R. STOWELL DEWANTE AND STOWELL BANITARY AND CIVIL ENGINEERS 5709 FREEPORT BLVD. SACRAMENTO, CALIFORNIA 95822 PHONE 428-6950 — AREA CODE 916 January 8, 1971

Mr. Wm. B. Layton, Jr. Tahoe City Public Utility District P.O. Box 33 Tahoe City, California 95730

Re: Application for Increased Disposal Capacity at Cinder Cone
Dear Bill:

This is in response to your request for comments and information regarding the various points raised by the U.S. Forest Service in their letter of December 21, 1970 to you. The cited letter was in reply to your letter of October 30 requesting an increase in the permitted volume of effluent disposal from 1.25 mgd to 2.8 mgd, and listed 7 conditions which must be satisfied prior to permitting any increase in capacity.

The following comments are arranged to correspond with the 7 points listed in the Forest Service letter:

- 1. The various deficiencies in construction at the Cinder Cone cited in correspondence and reports by several parties, to my knowledge, include the following items:
 - a. Bottoms of trenches not leveled to specified tolerance.
 - b. Sides of trenches not constructed according to plans, and protruding roots in sides.
 - c. A layer of fine material not placed on the bottom of those trenches constructed in coarse cinder areas.
 - d. Some trenches extended into the Tahoe Drainage Basin, and some allowed spillage at ends.
 - e. Improper functioning of mechanical equipment at disposal area.

As discussed recently on the telephone, I understand that all of the above deficiencies have now been corrected. While it is true that some deviation still exists from the "letter" of the plans and specifications, the deficiencies have been corrected in accordance with standards and criteria mutually agreed upon

Mr. Wm. B. Layton, Jr. Tahoe City P.U.D.

Jan. 8, 1971

by the parties involved, and the disposal area as it now exists does conform to the original intent and concept of design. The disposal facilities are certainly at least functionally equivalent to the original design, and I so certify.

- 2. Although retesting of Zones 3 and 4 at this time of year would be very difficult and expensive, it is understood that the District has commenced a retest program to determine capacities of trenches in these two zones. I must recommend, however, that you perform such tests only to the extent practicable under winter conditions, and not to the extent of endangering the successful operation of the disposal facility by varying widely from the intended plan of operation, bearing in mind the serious problems which could develop from freezing conditions. I am very happy to learn that you will include some temperature measurements and observations of the trenches under the snow blanket, since this information will be very valuable for future operation and design.
- From our recent telephone conversation, I understand that you have instituted the modification in the monitoring program as outlined, including an increase in coliform samples, additional chemical analyses of samples at Station No. 8, and better identification of samples as to location and date. With regard to Item 3d in the Forest Service letter, it is my opinion that the installation of remote reading overflow indicators at the trenches at this particular time would be both costly and difficult. Since the cable is shorted and probably cannot be fixed until spring, communication of signals would have to be by radio. It appears to me that your installation of vertical test pipes extending through the snow at the four locations suggested in Miles' Report, with observations on these test pipes being made twice a week, plus your installation of an overflow line from Zone 2 to the very absorptive first trench of Zone 3, would afford adequate protection against any surface overflow from the trenches. In other words, as presently constructed, there is an automatic overflow from Zone 1 to Zone 2 and thence to Zone 3. It is therefore difficult for me to conceive of an operating situation in which you would not have a considerable excess of capacity for handling any flows which might be pumped to the Cinder Cone during the next 6 months. Consequently, I suggest that the installation of remote sensing and reporting equipment be deferred until the snow is off the ground and the communications cable is repaired.

Mr. Wm. B. Layton, Jr. Tahoe City P.U.D.

Jan. 8, 1971 -3-

- 4. As you have indicated to me, Tahoe City PUD and North Tahoe PUD are in agreement with other agencies involved that the average daily sewage flow from a single family residential unit be taken at 300 gallons per day, until such time as data now being collected justifies a modification of this value.
- 5. The Forest Service requests an allocation of capacities be furnished, and I think that you can better supply this information directly.
- This condition relates to alternative disposal plans in the event the Cinder Cone capacity is exceeded. As you well know, we have been studying alternative means of disposal of sewage effluent from the Tahoe City PUD for a number of years, and have considered and investigated many different sites and methods. At this particular point of time, considering that additional disposal capacity would probably not be required for approximately 2 years, we believe there are several feasible and practicable alternatives available to the districts for providing additional disposal capacity. Since the description of these plans deserves somewhat greater space than might be provided in this letter, I am covering them in the enclosed memorandum. I have included some preliminary cost figures, but these must be regarded as rough, as they do not have the benefit of detailed surveys.
- 7. This condition requires that the alternative disposal plans and methods of implementation be described in a Memorandum of Understanding. If you can indicate the means of financing the improvements described in the enclosed attachment, I would think it would be a simple matter to incorporate everything in such a memorandum.

Please let me know if you require any further information or data on any of the matters discussed above.

Sincerely,

DEWANTE & STOWELL

Rando

EXHIBIT A

RHD/lee Encl.

cc: Tom Llewellyn Ralph Stowell Randolph H. Dewante

Jan. 8, 1971

FROM TAHOE CITY & NORTH TAHOE P.U.D'S

The following paragraphs present and describe several alternative plans for disposal of sewage effluent from the Tahoe City and North Tahoe P.U.D.'s which would be in excess of the capacity of the Cinder Cone disposal system. In general, each of the plans is intended to provide capacity of about 0.75 mgd. All of the plans are based on providing temporary facilities which would be used for probably not more than 3 years. A sketch map is included to show the general location of the proposed plans. Preliminary cost estimates of construction, excluding land costs, are also given.

Plan 1

The first alternative for increased disposal capacity which should be mentioned is the expansion of the present facilities at the Cinder Cone, as originally planned. Existing structures and pipework are arranged for distributing effluent to additional percolation trenches to the west and north of the existing trenches, as shown on the contract plans. To provide for a capacity of 0.75 mgd, it is estimated that trenches aggregating about 7500 feet in length would be required. Related piping and distribution boxes, and revisions in fencing would also be required. It is assumed that the existing treatment plant at Tahoe City can adequately handle up to 3.0 mgd without any significant decrease in removal efficiencies. The cost of these additional facilities is estimated at \$65,000. Such expansion would of course require Forest Service approval and permit, but if the Forest Service would be willing, it presumably would be possible for the districts to acquire the Cinder Cone disposal site by purchasing land equivalent in value at some other location desired by the Forest Service, and then accomplishing an exchange.

Plan 2

One of the obvious alternatives for additional disposal capacity is to construct new percolation trenches in an area near the present facilities. The nearest available private lands are located in Section 27, approximately 4,000 feet to the north of the Cinder Cone. There are approximately 40 acres available at this location, and a similar area would also be available in Section 23 to the northeast, which would involve a longer transmission line. It would be a simple matter to extend a pipeline from the existing primary distribution box at the Cinder Cone to these sites, and percolation trenches and other appurtenances similar to those now provided at the Cinder Cone could be constructed. Since the sites are at a lower

elevation, flow would be by gravity. It is estimated that the cost of facilities to provide an additional .75 mgd of disposal capacity in Section 27 would cost approximately \$100,000, and in Section 23, \$250,000.

Plan 3

There are 80 acres of private lands in the southwest one-quarter of Section 10, T15N, R16E, which are located outside the Tahoe Basin and may provide a good effluent disposal site. However, some subsurface investigations would be necessary to insure that underground water flow would in fact be towards the Truckee River. This plan depends on the construction of a short portion of the Truckee River Export Line, which is presently under design and scheduled for commencement of construction in the Spring of 1971. Installation of the necessary section of the line could be accomplished by the end of 1971. Raw sewage would be processed in the existing treatment plant in Tahoe City, with a portion of the effluent being discharged to the new export line. A temporary lift station and force main 3500 feet long would be constructed to pump the effluent some 850 feet up to the disposal site. Percolation trenches and distribution boxes would be provided on about 20 acres of land for receiving the effluent. Estimated cost of Plan 3 is \$210,000.

Plan 4

This plan involves disposal of primary effluent on private lands in Section 22, T17N, R16E, east of and approximately 480 feet higher than the Truckee River. The site is one of those included in Matthews' investigation of 1968, and was reported as offering good possibilities for percolation. As in the case of Plan 3, the plan depends upon the construction of the Truckee River Export Line, but to a greater distance downstream. Construction of the line to point opposite the site would be completed by the end of 1972 according to present scheduling. A portion of the effluent from the Tahoe City plant would be discharged to the newly constructed export line, and a temporary lift station would be installed to pump the effluent to the disposal site, similar to Plan 3. A total of 20 acres should provide ample space for the necessary percolation trenches and related facilities, and it is estimated that the total cost, excluding the export line, would approximate \$160,000.

<u>Plan 5</u>

Another plan, very similar to Plan 4 described above, consists of disposal to the Bald Mountain site in Sections 24 and 27. This site was also investigated by Matthews, but ownership is with the Forest Service and therefore a use permit would be required. Disposal would be at a slightly higher elevation and a little farther from the Export Line than in the case of Plan 4. Estimated cost is \$210,000.

Plan 6

There appears to be a good possibility for temporary use of a portion of the new Placer County garbage disposal site for effluent disposal. This site lies in the west half of the north-west quarter of Section 28, on the south side of the Truckee River, and will not be entirely used for its intended purpose for many years in the future. Use of this disposal site would involve the same general scheme as outlined above for Plans 4 and 5, namely the installation of a lift station for pumping effluent from the Truckee River Export Line to the disposal site. In this case, the lift would be about 520 feet, and the distance 3500 feet. Estimated cost of this plan is \$190,000.

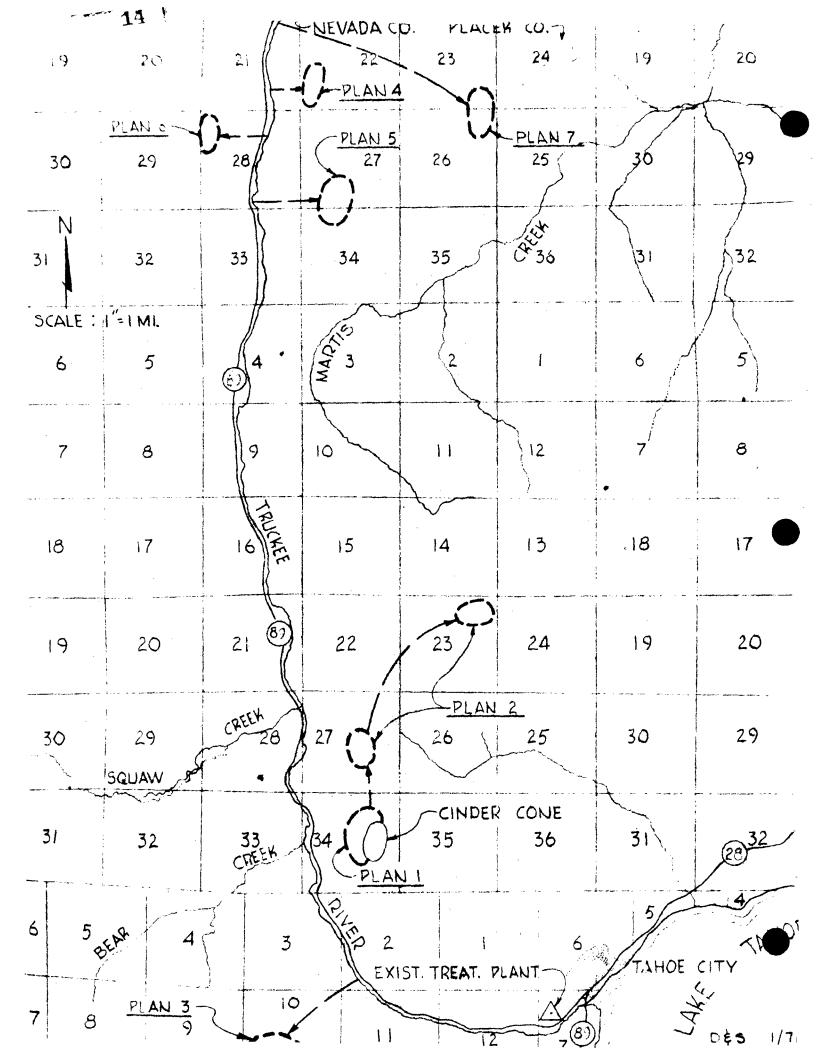
<u> Plan 7</u>

This plan calls for disposal on private lands in Sections 26 and 23, as shown on the sketch, which is another of Matthews' sites. It would be similar to Plans 4, 5 and 6, except it would require a longer force main (11,000 ft.), but would be at a lower elevation. Estimated cost is \$250,000.

While not considered as an alternative plan in the sense of those described above, there is a possibility that the Meeks Bay-Rubicon Area could be served through the South Tahoe Public Utility District, as has been previously suggested. Obviously, the diversion of flows from existing and new units in this area would provide additional capacity in present and new disposal facilities for remaining areas in the Districts.

DEWANTE & STOWELL

EXHIBIT A



In the foregoing letter from Randolph Dewante, which is the District response to the Forest Service letter dated December 21, 1970, there were two items, namely Items 5 & 7 that could not be answered by Dewante, and as you will note, he suggested that the Districts respond to these items. The following is the response from the Districts:

5. The following is a schedule showing allocation of capacities not yet being used, for all existing units in both utility districts. This schedule is based on an average daily sewage flow from a single-family residence of 300 gpd. No allocation has been provided for future construction.

DESCRIPTION	TCPUD	NTPUD	WASHOE	TOTAL
7 Day Average (Peak Sewage Flow, 12-28-70 to 1-3-71. See Back) 1	455,400	701,700	183,400	1,340,500
TCPUD CONNECTIONS 1550 Existing, Jan. 71 117 Condominiums Under Construction State Parks 3	465,000 35,100 66,000			465,000 35,100 66,000
NTPUD CONNECTIONS 1,125 Existing, Jan. 71 171 Condominiums Under Construction		337,500 51,300		337,500 51,300
WASHOE SEWER IMPROVEMENT DISTRICT #1 Casinos Under Construction			40,000	40,000
SUB-TOTAL	1,021,500	1,090,500	223,400	2,335,400
TCPUD - CAN'T SERVE 710 Existing, Jan. 71	213,000	****		213,000
GRAND TOTAL	1,234,500	1,090,500	223,400	2,548,400

NOTES:

- 1. It was decided to use the sewage flow period of December 28, 1970 to January 3, 1971 for the following reasons: (a) This is the most recent peak period and compares very favorably with the peak period of August which was used formerly as the peak flow period. (b) All measuring devices are reading more accurately today than during the August period. (c) It is felt that the infiltration water and contractor flushing water affected the accuracy of the August data.
- During 1970, about 100 homes were built in Tahoe City and 50 in North Tahoe. We have assumed that 1/2 of these homes were constructed within areas presently sewered, and, therefore, are included in the sewage flows of line 1. The other half are in areas to be sewered and, therefore, have been included in the existing homes for each District.
- 3. The Tahoe City Public Utility District is in the process of entering into an agreement to serve the 3 State Parks within its District for the following capacities:

Sugar Pine Point State Park D. L. Bliss State Park

150,000 gpd 30,000 gpd

6,000 gpd

Emerald Bay State Park

It will be possible to sewer Sugar Pine with facilities constructed and under construction. Because of the moratorium, no additional campsites can be built at Sugar Pine. Therefore, we are not planning on 120,000 gpd of sewage from Sugar Pine. D.L. Bliss and Emerald Bay are fully constructed, and will contribute 36,000 gpd.

EXHIBIT A

NOTES (Cont'd)

4. The purchased capacity by each of the 3 Districts in the Joint Treatment and Disposal Facilities, assuming that the Use Permit with the Forest Service can be increased in accordance with our request, is as follows:

TCPUD NTPUD WASHOE Total 2,500,000

SEWAGE FLOWS FOR WEEK OF DECEMBER 28, 1970 to JANUARY 3, 1971

Date	Total Flow	TCPUD	NTPUD	WASHOE
Dec. 28 29	1,273,600 1,333,100	494,263 471,100	611,337 694,000	168,000 168,000
30	1,436,700	587,300	679,400	170,000
31	1,233,100	365,000	700,100	168,000
Jan. 1	1,394,700	460,200	764,500	170,000
2	1,407,800	378,800	781,000	248,000
3	1,304,800	431,170	681,630	192,000
TOTAL	9,383,800	3,187,833	4,911,967	1,284,000
7 DAY AVERAGE	1,340,542	455,404	701,709	183,429

7. Tahoe City Public Utility District is prepared to finance 100% of the cost, if this proves necessary, of the construction of the facilities described within the alternatives that Engineer Randolph Dewante has described, out of tax revenues over a 2 or 3 year period. It is hoped, however, that it will be possible to obtain participation from North Tahoe Public Utility District, and possibly even Federal and/or State assistance.

ST WEE GRINGTON
FINATHAL ROWLEY
WILL FORNICK JR
OPY A ROHLE
WALL NO DISKNE
WALL NO DISKNE
EDWA DE MITCHEL
FIDN E ROBERTS
AM H. BY NEET

ORRICK, HERRINGTON, ROWLEY & SUTCLIFFE

Counselors and Attorneys at Law

405 MONTGOMERY STREET

SAN FRANCISCO, CALIFORNIA \$4104

TELEPHONE (415) 392-1120

W. H. ORRICK

ABLE ORRE ."

Tahoe City Public Utility District P. O. Box 33
Tahoe City, California 94730

Re: Sewer Assessment District No. 6B

Gentlemen:

ANDREW DOWNEY ORRICK
JAMES K HANNES
RICHARD C SALLADIN
RICHARD J LUCAS
CARLO S. FOWLER
DONALD A SUICHTER
PAUL A WEBBER
JAMES R MADISON
DILLMAN C KINSELL JR.
WILLIAM I HOLSINGTON

You have asked our opinion as to the effect on the subject proceedings of the recently stated position of the United States Department of Agriculture, Forest Service, as revealed in a conference on December 15, 1970, and confirmed by letter dated December 21, 1970, signed by H. E. Branagh, Forest Supervisor, Tahoe National Forests. Specifically, you have asked whether in view of this position the District is legally empowered (1) to proceed with the sale of bonds and award of contract for construction of facilities in Sewer Assessment District No. 6B, and (2) to confirm an assessment for construction of sewage collection facilities in subsequent assessment districts affected by the position of the Forest Service.

The position taken by the Forest Service is that any amendment to the present special use permit for the "cinder cone" effluent disposal area, either to increase the amount of effluent disposal or to extend the termination date, will be granted (a) only upon the satisfaction of seven conditions expressed in the letter of December 21 (all relating to capacity of or testing at the cinder cone) and (b) only to the extent required to handle the effluent disposal of houses and units constructed or under construction by December 31, 1970. Under these circumstances, in our opinion the District may not legally proceed (a) to sell bonds representing unpaid assessments in Sewer Assessment District No. 6B; or (b) to levy an assessment on any land proposed to be included in any future assessment district, construction of improvements on which would be rendered impossible by the restrictions set forth above, to which the Forest Service letter applies. reasons for this opinion are as follows:

- The proceedings in Sewer Assessment District No. 6B are being taken under the Municipal Improvement Act of 1913, pursuant to which the District is empowered to levy an assessment on land for benefit received from the project for which the assessment is levied. The assessment is levied against, and the benefit is legally deemed to accrue to land alone; the benefit must be determined on the basis of the highest and best use of that land. Thus, whether property is developed or undeveloped, it must be assessed on the basis that undeveloped land capable of being developed into residential or commercial property receives benefit identical to land already developed in such manner. To the extent that zoning restrictions, green belt dedication or other barriers to the development of land exist, as to any parcel or parcels, these restrictions must be considered in reducing or eliminating the benefit deemed to be received by such parcel or parcels and adjusting the assessment accordingly.
- 2. The position taken by the Forest Service, as a practical matter, imposes an indefinite building moratorium on the area to be served by the collection system in Sewer Assessment District No. 6B. If this moratorium remains in effect, the theoretical choices available to the District in designing a system to serve the area and assessing the property owners therefor, would be:
- (a) to design a system which served only the developed property and provided no present or future benefits to undeveloped property;
- (b) to design a system which served the entire area, but to omit any assessment against undeveloped property;
- (c) to design a system to serve the entire area and spread the benefit equally on all parcels, developed or undeveloped, but to provide for payment of the cost of the system to be paid by undeveloped parcels through some means other than an assessment against the land; or
- (d) to design a system which would benefit the entire area and to spread the assessment to pay the cost of construction on the entire area, but in assessing the benefit

to the undeveloped parcels, to include a factor reflecting the loss of benefit (or the indefinite postponement thereof) by virtue of the moratorium.

Alternative (a) appears to be practically impossible and alternatives (b) and (c) are legally impossible.

Alternative (d) is subject to such legal question and practical difficulties as to render it unlikely that it could be carried out. In our opinion the imposition of any assessment for benefits received from a sewage collection system when service through that system is indefinitely postponed (at least unless and until construction of facilities for export of effluent from the Lake Tahoe basin is completed) would be subject to grave legal question. So far as we are aware, no case has decided a comparable question. In the absence of a favorable Appellate Court decision, we as bond counsel to the District would be unable to approve such an assessment.

In conducting prior assessment proceedings, the District has been able to rely upon the facts that, if building in the area of the District continued at a normal rate, temporary disposal facilities would be available for undeveloped lots until completion of the West Shore Export Line and that meanwhile the owner of any single parcel could not allege that development of that parcel was prohibited by any existing restriction. In our opinion, proceedings in Sewer Assessment District No. 6B and other assessment districts could proceed so long as, and only so long as this condition remains true, and so long as there is no practical or legal building restriction imposed against any parcel or parcels assessed at the time the assessment is levied.

We are also of the opinion that no provision of any existing law prohibits the District from proceeding with the construction of the West Shore Export Line regardless of any position taken by the United States Forest Service.

Very truly yours,

Joseph J. Hughes

JJH:mc

L L. CHAMBERLAIN

1666 - 1913

T. L. CHAMBERLAIN

T. L. CHAMBERLAIN, JR.

PAUL H. CHAMBERLAIN

CHAMBERLAIN & CHAMBERLAIN

ATTORNEYS AT LAW BANK OF CALIFORNIA BUILDING P. O. BOX 32 AUBURN, CALIFORNIA 95603

> TELEPHONE 885-4523 AREA CODE SIS

OF COUNSEL THOMAS G. CHAMBERLAIN NEW YORK CITY

January 6th, 1971

Tahoe City Public Utility District Box 33 Tahoe City California 95730

Attention: Mr. Wm. E. Layton, Manager

In re: WEST SHORE EXPORT FACILITIES - III

Dear Bill:

Pursuant to your request as to the legality and feasibility of proceeding at this time, with the construction phase of the next major sewer export facility (generally referred to as West Shore Export Facilities - III), and the financing thereof, in the light of the tax moratorium included among the terms and conditions of annexation applicable within the territory to be served by this project, the following analysis is submitted.

One of the terms and conditions of annexation applicable to the southerly annexed area within the District was that the property therein would not be subject to District taxation for construction or maintenance of sewage works and facilities -"until such time as the Tahoe City Public Utility District is physically able to provide sanitary sewage disposal services."

In reference to the above export project, having an estimated construction cost of approximately \$2,000,000.00, we understand the District's share (as distinguished from available Federal funding) will be approximately 20%, or \$400,000.00. The District's share will be financed in large part by its taxing power.

Due to the tax moratorium referred to above, these taxes, in the preliminary stages, would have to be levied on properties elsewhere in the District until the conditions of the moratorium are met, and the moratorium then becoming ineffective.

Tahoe City Public Utility District January 6th, 1971 Page two

Since this major export facility is of District-wide benefit, and an integral part of the regional sewage export project, the financing of this project by the use of District taxes, generated in the manner referred to in the preceding, would not be illegal, particularly since this program would be temporary in nature, until the moratorium becomes ineffective. Upon the moratorium becoming ineffective within the various portions of the annexed areas, the District can recover these deferred taxes by using the taxing zone procedures available under the law, and as provided for among the annexation terms and conditions.

Sincerely yours,

CHAMBERLAIN & CHAMBERLAIN

... Sault Clamber

Paul H. Chamberlain.

PHC:ar

EXHIBIT C

- 1. Because of the legal opinions of Joe Hughes (Exhibit B) and Paul Chamberlain (Exhibit C), we cannot sewer the area of Meeks Bay-Rubicon Bay, and thereby tax that area. Since this area is 10 15% of our total assessed valuation, we will lose this much financial capability in financing the Regional Sewerage Facilities.
- 2. If we cannot be allowed our normal rate of growth of 9% per year in assessed valuation, which represents an annual increase in sewage flow of only 2 1/2% per year, we will not realize 36% growth in our assessed valuation at the end of 4 years, when the Regional Facilities are scheduled to be operative.
- 3. If the 8,000 vacant lots in North Tahoe and Tahoe City Public Utility Districts cannot be improved by the property owner for 4 years because a building moratorium exists, then the County Assessor will be required by law to reassess these unimproved lots in accordance with prices established by actual sales. To predict the values of these unimproved lots which cannot be used by the owners, we contacted 15 brokers in the North Tahoe area to obtain their opinions as to the value of these unusable lots. Attached are their signed statements. The consensus of opinion is that these unuseable properties will drop to a value of about 1/2 their present value. Since the County Assessor will have to reflect this decrease in his next appraisal, we estimate that this will result in a loss of \$4,000,000 to \$6,000,000 in assessed valuation, or an additional loss of 10% in our assessed valuation.
- 4. If we lose the scheduled income from the new connections of 250 per year at \$225 per connection, we will lose an annual income of \$56,000, the loss of which will further decrease our ability to finance the Regional Export Facilities.
- 5. If new construction is curtailed for 4 years, then there will be a serious employment problem in the area, since at least 50% of our local income is received from the construction industry. There are about 5,000 residents in our community, and of these the following and their families directly receive their income from the construction industry in our service area:

<u>Description</u>	Number
Carpenters	350
Contractors	50
Foremen	30
Plumbers	45
Painters	45
Electricians	45
Laborers	300
Other trades	100
Supporting Industries	200
Dependents (Families of above)	1,500
TOTAL	2,665

- 6. If our community is thrown into a moratorium because of a sewage problem, the publicity will have an extremely negative affect upon our community, and will undoubtedly result in a serious affect upon the other major industry of our community tourism. This will result in loss of jobs to motels, restaurants, and other businesses that depend entirely upon the tourist.
- 7. If we fail to award a contract on Sewer Assessment District 6B, the propery owners in the area of that assessment district (Tahoma) will undoubtedly have to pay at least \$350,000 more for their local sewage collection system at some later date when the building moratiroum is lifted.



OFFICE OF

PLACER COUNTY ASSESSOR

COURTHOUSE

AUBURN, CALIFORNIA 95603

TELEPHONE 885-771

EXT 29

FRANK R. CHILTON, JR. Assessor January 5, 1971

Mr. William B. Layton, Jr. Tahoe City Public Utility District P. O. Box 33 Tahoe City, California 95730

Dear Bill:

As per your request yesterday afternoon, by phone, in which you asked this office to comment on the effect a moratorium would have on property values in the Tahoe area, my answer is as follows:

Usually, such a moratorium would have an effect on property values; however, this office has no way of measuring this until property sales show a trend downward. Certainly, such a change will be examined each lien date and property value changes made on the assessment roll for that year.

Hope this answers your question, Bill.

My best to you and your office staff for the New Year.

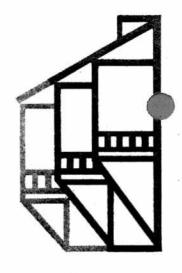
Cordially

FRANK R. CHILTON, JR. Assessor, Placer County

FRC:rm

January 6, 1971

Tahoe City P.U.D. Tahoe City, Calif.



Gentlemen:

If the much discussed building moratorium were put into effect the consequences would be disastrous to small investors as well as large developers.

Unimproved properties would in my opinion lose 40 - 50% of their value. Most buyers intend to build within one year from the date of their purchase. Enforced delays of building plans would impose extra financial burdens and in many cases cause forced sales at distressed prices.

Good planning is most desirable but to halt all progress would be catastrophic to the economy of the entire Tahoe area. Let's hope a more practical method of preserving Tahoe can be found.

Sincerely,

William J. Friedrich Real Estate Broker at

The Villas

WJF:mh



Agate Bay Realty

Box 428, Carnelian Bay, Calif. 95711

(916) 546 - 2622

Mr. William Layton Tahoe City Public Utility District Tahoe City, California 95730

January 6, 1971

Dear Mr. Layton:

The impending building moratorium is a matter of grave concern to every business in the Lake Tahoe Area, all of whom would be seriously affected.

Those of us in the Real Estate profession will be forced into an untenable position.

In good faith we have sold properties which may not only decline disastrously in value but may in fact become a burden because of rising taxes and sewer assessments. The majority of these properties were sold as investments with the assurance that a return on the investment would be possible.

I would applaud halting future multiple developments, but to impose a moratorium on properties already sold, assessed for sewer, with capacity spoken for and supposedly granted, seems criminal.

We strongly recommend that solutions other than a residential building moratorium be sought immediately.

Sincerely,

Mrs. Manon Sinclair

Realtor



POST OFFICE BOX 459 CARNELIAN BAY, CA. 95711 Phone: (916) 546-2526

January 6, 1971

Tahoe City Public Utility District William B. Layton - Manager

Dear Sir:

The proposed construction moratorium within your district is the final blow to long suffering residents and property owners at Tahoe who have complied with so many restrictive measures and regulations in the past.

Existing structures will be deprived of a service they are already paying for. Property values must be adversely affected.

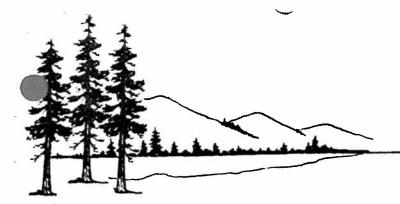
Vacant lot owners will be denied the right to improve their properties or dispose of them - who will purchase? The entire economy of the area - even now at a low ebb must be adversely affected - all businesses cannot help but feel the impact of such an action.

In my opinion, all possible means should be explored to avert the proposed move.

Sincerely

Ben Damanchki. Realtor

and property owner



Tahoe Park Realty

1785 HIGHWAY 89 P. O. BOX 1225 TAHOE CITY, CALIFORNIA 95730 TELEPHONE (916) 583-2336

HOMES · INCOME PROPERTY · LOTS

January 5, 1970

Board of Directors Tahoe City Public Utility District Tahoe City, California

Gentlemen:

The prohibiting of service to any further structures by the TCPUD as of Dec. 15, 1970 is an act which will have far reaching effects over the next four years. It is an unusual act of police power by a local government agency -- forced on it by a Federal agency, the Forest Service.

Granted that government agencies do have police powers over private landowners; this act is an extreme measure - with extreme consequences as the result. What is the value of a lot which cannot be improved?

Lots which cannot be improved are in the same catagory as land which has been zoned for open space. There would be some small additional value for existing off site improvements and map work which has been done, but none of this value could be realized for four years. For example, a lot with a market value of \$8,000 last summer is now worth something less than raw land. Raw land might have value for grazing or recreational uses, but individual lots are too small for such uses. Raw land has been sold recently for \$6,000 an acre in the basin. Therefore, a acre lot should be appraised at \$1,500, with the realization that it is going to have to remain in its present state for four years, while taxes and bond payments are due and payable as though nothing else were changed.

Owners of property which is undevelopable due to some police power act of government would, in my opinion, be justified in seeking a reduction in property taxes commensurate with the reduction in the value of their property. Many small holders of individual parcels can be expected to balance current investments against the future worth four years down the road and tax and bond payments during the interval and decide to let the property go. This will increase the burden on property owners who do pay taxes in the balance of the county. Sales to the state for taxes and foreclosures by note holders are not good business. Placer County and the Tahoe Basin does not need a mess of this kind to ruin its economy and reputation*-as a good place to have a second or recreation home.

There are some 8,000 single family zoned unimproved lots in the Placer County portion of the Tahoe Basin. Of these, perhaps 400 are sold each year. This market will disappear if buyers have no chance

of improving their purchase. Most lots are sold to prospective improvers, not to speculators. Realtors, salesmen, titlemen and anyone else connected with surveying, constructing offsite improvements, selling and conveying land titles will be out of business. The Placer County Building Department at Tahoe City issued over 600 permits in 1970. Seventy five percent of these are estimated to be for new dwelling construction, nearly 14 million dollars worth. With no new sewer connections available, no contractors or builders will be in business in the Placer portion of the basin. This puts all building trades and suppliers out of business except for repair jobs. Placer County does not need the high unemployment which will result.

The Forest Service must be redirected back to the business of growing trees and leave sewage service to the agencies already designated to handle it. When the snow melts we had better have a solution or real damage will result.

Very truly yours,

Bolia W. Scott

29



P. O. Box 618, Tahoe City, Calif.

LAKE TAHOE PROPERTIES

Phone JUniper 3-3112

January 6, 1971.

Tahoe City Public Utility District, Tahoe City, California, #95730.

Att'n: Bill Layton, Manager.

Gentlemen:

As a Realtor I wish to protest against any kind of building moratorium in the Tahoe City area. I have been engaged in the real estate business as a Real Estate Broker and Realtor for the past twenty-three years and such a moratorium would cut unimproved lot values in half. It would be very difficult to sell any lots if the buyer would not be able to build due to such a moratorium.

Please exert every influence to prevent any kind of building moratorium in this area.

Very truly yours

FAB/s

Dave Stollery, Realtor

POST OFFICE BOX 888, TAHOÉ CITY, CALIFORNIA 95730

Gffice 916/583-4442 Residence 916/583-5285



January 6, 1971.

Tahoe City Public Utility District, P. O. Box
Tahoe City, California, #95730.

Att'n: Mr. William Layton, Manager.

Gentlemen:

The rumors of a building moratorium on the North and West Shores of Lake Tahoe for the next four years are very disturbing, to say the least.

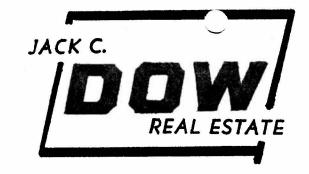
The Tahoe Sierra Board of Realtors' Multiple Listing Service has from three to four hundred lots available for sale at most times. A four year building moratorium would quite possibly cut the market value of these lots in half, as very few buyers would be interested in purchasing a lot if it was not immediately buildable. The decrease in the value of these lots would naturally affect their taxable value, and would materially reduce Lake Tahoe North and West Shore land values.

I therefore urge you, most sincerely, to do your utmost to prevent such a building moratorium.

Sincerely yours,

DJS/s





P. O. BOX 269 . TAHOE CITY, CALIFORNIA 95730

HOMES HOMESITES
INVESTMENTS DEVELOPMENT
MANAGEMENT

MULTIPLE LISTING SERVICE

PHONE: Area Code 916 - 583-3784

January 6, 1971

Mr. William B. Layton, Jr. Manager Tahoe City Public Utility District Tahoe City, Calif.

Dear Sir:

I would like to protest your high-handed dictum to the average property owner that they cannot build on their property due to the "Cinder Cone" problems you are having.

Many of these owners have had their lots for 20 years, waiting until the day they could move up to this beautiful area, retire and enjoy the clean air. With the present proposal that building be stopped the values of the properties in the area will decline at least 50% and probably more. This would mean that the tax income to the County of Placer would drop in proportion—as the Market Value declines so does the assessed values. It would also mean that the other businesses in the area would suffer as the "payroll income" drops. Any moratorium, which is in effect what you are proposing, would drastically hurt us all.

We realize that an orderly growth is necessary, but do not agree with the Planning Commission on approval of 250 units (condominiums) at present, which uses up all the suggested yearly growth, and leaves none for the average lot owner. This is discriminatory and should not be allowed.

It is our understanding that tests have proved the area now being used for waste disposal is more than adequate for many years and the U.S. Forest Service has taken unnecessary action at this time. How can they stop thousands of people from a normal way of life and ruin our economy without any say-so by the people involved?? Can the property owner of record be informed to whom to protest in order that we get some responsible action in the near future?

Sincerely,

THERESA DENTON REAL ESTATE

REALTOR

PHONE LIBERTY 6-3335
P. D. BOX 21 NEAR BROCKWAY ON HIWAY 28
KINGS BEACH, CALIF.

January 6, 1971

Tahoe City Public Utility District Tahoe City, Calif.

Gentlemen:

This is to advise you that we feel, not only as realtors, but as residents of the North Tahoe Area, that a moratorium on building in the state of the North Tahoe Area, that a moratorium on building in the state of the North Tahoe Area, that a moratorium on building in the state of the state

Thousands of people have purchased property in this area and to discriminate against them because they have not been able to build and other have, is wrong. They, in many cases have completely retired the sewer bonds charged to their property and even a layman can see the legal entanglements you will provoke.

If the capicaty for sewage desposal must be limited, the are many other ways to do it.

Very truly yours,

THERESA, DENT ON REAL ASTATE

Theresa Denton, Rea

Maxine Polzin, Regitor

RECEIVED

JAN 7 15/1

IAHOE CITY P.U.D.



"Mac" McPherson

Realtor

By the Big Tree in Tahoe City

On Lake Tahoe's Beautiful North Shore

TELEPHONE (916) 583-5311

POST OFFICE BOX 392

TAHOE CITY, CALIF. 95730

January 6, 1971

Takoe (ity P.U.). Takoe (ity, (a. 75730

le: Your question as to the effect of a 4-year randonium on construction to unimproved property in Tahoe area.

Gentlemen:

ry opinion on the above referenced question is that the value of unimproved near property is in relation to the potential use of the property. A 4-year moratorium could deny the property owner any use of his property for the 4 years, so the property would be unsaleable at present market price. The cost of holding property is a conservative 10% of its value per year, so a 4-year moratorium would reduce the value of the property to 50 to 60 percent of today's value.

The effect is more fur reaching than it seems on the surface, as very few buyers will purchase property to hold it 4 years before building, so sales would be slow even at a 40 or 50 percent discount from today's prices.

This problem must be solved now before our area suffers a serious economic recession that very few of us could survive.

Please call upon me for any help I can provide, I am receiving 2 or 3 phone calls a day from people I have sold lots to over the past 10 years wenting information and offering to help in any way they can so their lots will be buildable again.

her you say \$5,000 to \$80,000 for a lot with a \$900 to \$5,000 seven bond, and then find you can't build on it for 4 years, you have every reason to be upset.

Very truly yours, Pherson

MAX HOFF & Associates

Regitors

P. O. BOX 245, HOMEWOOD, CALIF. 95718 (916) 525-7434

34

BH

OFFICE AT GLENRIDGE PARK ONE QUARTER MILE NORTH OF MEEKS BAY

on the beautiful west shore

Jan. 6, 1971

Tahoe City P. U. D. Tahoe City, Calif.

Centlemen:

You must know that the proposed 4 year (?) moratorium on new construction in this area would be a catastrophe of major proportions.

Quite obviously, to those of us in related businesses it would cover the range from simply rough going to total financial disaster. I refer specically to those engaged in developing lots in the time-honored type of subdivisions, those selling lots, those people who earn a living in some phase of construction, directly or indirectly. I would guess that this would include half of the local and permanent population.

It is no secret that stopping all development, whether good or bad, has become the name of the game for some people in the area. The selfishness of this attitude should be so obvious that further comment is not necessary.

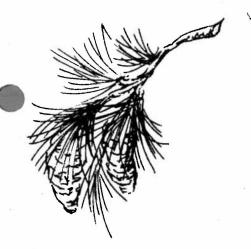
Of even greater importance because of the number of people affected is the impact on the individual lot owners who have been buying their property over a period of years with the intent to build within the next few years, and the resultant drop in property values.

Quite frankly, this is like saying because of the air polution problem created by automobiles, it will be illegal to sell or transport gasoline into the area. What would your car be worth?

I do not believe it is an exageration to say that a great many people would stop making payments on property which is impossible for them to use, refuse to make bond payments and tax payments, and simply write off their investments at lake Tahoe. A few speculators would be busy buying up this property at a tremendous discount with the knowledge that at some future date this problem would be solved and the property would have a value far in excess of their investment. And once again a few would make a tremendous gain at the expense of the many.

As an example let me point to the Kailua Park area. This is choice property just south of McKinney Creek, subdivided years ago without water supply or improved county roads. Consequently it is not readily buildable. I have sold these lots in the past for as low as \$350 to \$900, and most recently some have brought as much as \$2500. Other lots in the area, equal in size and quality except for qualifying for building permits, have been selling for \$6,000 to \$10,000. But if building is not to be allowed on these more expensive lots, are they worth any more than the Kailua Park lots?

Sincerely,



Dick Read Realty

LAKE TAHOE PROPERTY

January 5, 1970

CHAMBERLANDS OFFICE

P. O. BOX 192 HOMEWOOD, CALIFORNIA 95718 PHONE (916) 525-7733

Tahoe City Public Utility District P. O. Box 33
Tahoe City, California

Sirs

The questions has been asked what will happen to property values if owners can not build on lots that they now hold.

My opinion is that you will see a simable cut in prices and little or no sales. In effect is an owner can not build or sell his lot to be built upon the property has no value or is of use to an owner.

This can be shown by what has happen to lots sales this summer due to the lack of loans for building. In the seven years that I have been selling in Chamberlaads this has been the worst year for lot sales. I believe this has been caused by the lack of building funds and the problems assocatied with just when a new house could connect to the sewer.

If the U. S. Forest Service forces a building moratorium in the TCPUD lots will be placed upon the market in great numbers which will lower prices. If this condition lasts for a period of four or five years any lots sold will be at give away prices.

My opinion is that if property can not be used it has no value.

Diale Book

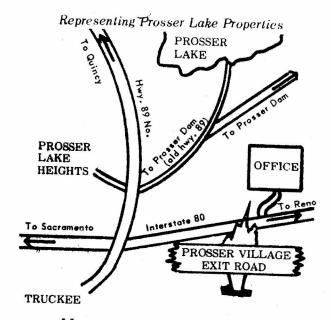
Realtor

JACK DUTTWEILER

REAL ESTATE BROKER

P. O. Box 57, Truckee, Calif. 95734 Phone (916) 587-3846 or (916) 583-5311

January 6, 1971



Tahoe City P.U.D. Tahoe City, Ca. 95730

Re: Proposed 4-year moratorium % construction

Gentlemen:

Regarding the question as to what effect a moratorium would have on property values, I don't think any of us can possibly imagine what the true consequences of a building halt would mean to this area.

Who is going to jump to buy a lot at even half price if it means that he will face bond payments, taxes, and interest for at least 4 years without being able to build or to sell to someone who wants to build?

The cost of holding a lot for 4 years would wipe out any gain made today even if a buyer picked up the lot at a 50% reduced price.

San we safely estimate that property values would only go down 50%? Our figures and percentages here at Tahoe have always been consistent with growth. Add to the normal conditions a serious economic recession—something we've never had—and then what happens to the slide rule?

Having sold property here in the Tahoe City area for the past 10 years and having maintained a close relationship with many of the existing lot owners who are planning to build, I feel it would be a disservice to these people if I didn't offer to help in any way I can on the problem that is facing all of us at this time. Please call on me if there is anything I can do.

Very truly yours,

Jack Duttweiler

Palo Alto, California January 7, 1971

Mr. Max Hoff & Associates Box 245 Homewood, CA. 95718

Gentlemen:

Pursuant to a letter dated December 21, 1970 from Tahoe City Public Utility District, Tahoe City, California, informing us, as owners of Lot 55, Glenridge Park #2, that we cannot build on our property due to the fact that sewerage facilities will not be available, --- just what is going on!!!

It would appear to us, who bought this building site in good faith and after considerable thought, that there are many questions that will have to be answered to our satisfaction -- probably the same questions that will be asked of every property owner on the west side of Lake Tahoe.

- 1. What happens to the investment we made in the building site; the monies that El Dorado County, State of California, has collected from us for so-called improvements (utilities, etc.)? Do we continue to pay "through the nose" for a "dead horse" for the next 15 years (which has been set out by Glenridge Park as assessments) and only be able to enjoy the view of the Lake when we drive up there and Park our car on the roadway the same as any other tourist can do? I think not. It would seem to us that this "political football situation" should have been worked out before any further developments were authorized. I don't think you should expect the "little" property owners to pick up the tab.
- 2. My husband is retired (medically) this Lake Tahoe home was to be out retirement home. Time is of the essence in our case. We must know what the outcome will be or else we feel there should be some monetary remuneration. We CAN'T wait four or five more years to build. Quite frankly, we will have to make other plans.
- 3. What happens if we discontinue payments on the building site in view of the present situation? Should you be able to repossess the land or would we be able to get our money back since the terms of the sale were not adhered to? It would seem to us that there should be some equation there. What recourse do we have?

We would just like to add that it is very defeating in this great country when a couple who have worked all their lives, cannot build a retirement home on a Lake that belongs to everyone - not to the Forest Service, the Tahoe Public Utility District, nor the developers who are obviously only interested in turning a fast buck.

We will expect a reply by return mail and hope you have some pertinent answers. I am sure you sold the building site in good faith, but what now?

Sincerely,

Miss of Steven

Mr. & Mrs. John R. Stenson

RESOLUTION OF THE BOARD OF DIRECTORS OF TAHOE CITY PUBLIC UTILITY DISTRICT AMENDING RESOLUTION NO. 452 AND DECLARING THE POLICY OF THE DISTRICT WITH REGARD TO CONSTRUCTION OF AND CONNECTION TO SEWAGE COLLECTION FACILITIES OF THE DISTRICT.

WHEREAS, on December 17, 1970, the Board of Directors (the "Board") of Tahoe City Public Utility District (the "District") adopted its Resolution No. 452 modifying and curtailing sewage service allocations; and

WHEREAS, the Board has conferred with federal and state officials concerning the effect of policies declared in that Resolution and the conditions under which such policies could be modified; and

WHEREAS, the Board believes that it is in the best interests of the District, and the Board has been advised that it is legally possible, to continue with construction of certain sewage collection facilities in the District;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF TAHOE CITY PUBLIC UTILITY DISTRICT as follows:

- 1. The Board will approve all applications on behalf of units already constructed or under construction within the District for connection to existing sewer lines in the District, and will encourage property owners and residents of the District to make such applications, where necessary taking any appropriate legal steps to enforce such application or connection;
- 2. The Board will authorize advertisement for competitive bids for the construction of West Shore Export Facility-III, and upon receipt of satisfactory bids for such construction, will award a contract therefor.
- 3. The Board will request an amendment to its Use Permit with the United States Department of Agriculture, Forest Service, which will
- (a) increase the permitted amount of effluent disposal to 2.8 mgd or a higher amount as necessary to serve existing structures in the District.
- (b) permit the United States Department of Agriculture, Forest Service, to amend the Use Permit unilaterally as of January 1, 1972, to prohibit disposal in the "Cinder Cone" area of effluent from units on which construction begins after December 31, 1971; and
- (c) permit the United States Department of Agriculture, Forest Service, to reduce the permitted amount of effluent disposal if tests of the capacity of the Cinder Cone, to be conducted during the calendar year 1971, indicate that adverse effects will develop if the Cinder Cone is used in accordance with the Use Permit as amended pursuant to (a) above.
- 4. Upon receipt of assurance from the United States Department of Agriculture, Forest Service, that it will act favorably upon the request made pursuant to Section 3 of this Resolution, and that the Forest Service, being aware of the alternative proposals as described in our letter of January 8, 1971, will give their unqualified support to the implementation of any one of the described alternatives that proves to be favorable and



in conformance with the Environmental Policy Act of 1969, the District will

- (a) authorize the sale of bonds representing unpaid assessments in Sewer Assessment District No. 6B;
- (b) award a construction contract for the construction of the facilities in Sewer Assessment District No. 6B; and
- (c) authorize the District's engineers to resume design of sewage collection facilities south of Sewer Assessment District No. 6B and to the southerly boundaries of the District.
- 5. Copies of this Resolution shall be transmitted to all Federal, State and Local authorities concerned with the Lake Tahoe Basin Regional Sewer Plans.
- 6. Resolution No. 452 is amended to the extent necessary to conform to the provisions of this Resolution.
- $\,$ 7. This Resolution shall take effect from and after its passage and adoption.

PASSED AND ADOPTED ON January 8, 1971, by the following vote:

AYES: Directors Pomin, Korich, Beck, Sherman

NOES: None

ABSENT: Spitsen

President of the Board of Directors Tahoe City Public Utility District

Attest:

Secretary of the Board of Directors Tahoe City Public Utility District

United States Department of Agriculture Forest Service

Tahoe National Forest Nevada City, California 95959

> 2720 December 21, 1970



Your ref: 10/30/70

Mr. Wm. B. Layton, Manager Tahoe City Public Utility District P. O. Box 33 Tahoe City, Ca 94730

Dear Bill:

This memorandum is in response to your letter of October 30, 1970, and in confirmation of material and discussion presented at our meeting on December 15, 1970. As our longhand memorandum stated, our position is consistent with advice received from the Regional Forester and the Federal Water Quality Administration. The essence of your request was to secure an increase of the permitted amount of effluent disposal from the present 1.25 mgd to 2.8 mgd and to extend the termination date from December 31, 1973 to December 31, 1975.

The Forest Service will agree to an increase in permitted capacity as provided under Clause 41, but only to the extent necessary to accommodate existing facilities and only after the following conditions are satisfied.

- 1. The various deficiencies in construction on record in previous correspondence and as noted in reports by Mr. Miles and Mr. Franks of California Water Resources Control Board, and in reports by Mr. DuBois of the Lahontan Regional Water Quality Control Board, must be corrected and certification, as required under Clause 35 of the permit, be provided.
- 2. A retest of Zones 3 and 4 be made following (1) above, to verify capacity.
- 3. A modification in the monitoring program be instituted as soon as possible which includes the items listed below.
 - a. The number of individual bottle samples taken at each test station for coliform counts be increased to 3.

- b. Additional chemical analysis of water samples from Station #8 be done to determine D.O., Temperature, T.D.S., and Nitrates for at least through a 12-month period.
- c. The chemical report from the laboratory should identify the exact source of samples taken at Station #8 and indicate the date when sampling points were changed.
- d. Remote reading overflow indicators which provide immediate indication of ditch failure directly to plant operating personnel should be installed immediately.
- 4. TCPUD reach agreement with NTPUD, Forest Service, Lahontan Water Quality Control Board, and the County of Placer Health Department on average daily sewage flow from a single-family residential unit.
- 5. Based on (4) above, your district must furnish a schedule showing allocation of capacities not yet being used. Allocation schedule must include all existing units in both utility districts. (For purposes of this item, existing units are those for which construction of the facility shall have been physically undertaken by December 31, 1970).
- 6. Your organization must provide alternatives to planned use in the event that Cinder Cone capacity doesn't develop and the quantity of effluent must be reduced.
- 7. These alternatives and the means by which they will be implemented must be described in a Memorandum of Understanding between TCPUD and the Forest Service.

Besides the seven conditions described above, the Forest Service will amend the Special Use Permit to provide for assuring a factor of safety of 1.5 to 1. This means the percolation capacity would be increased to allow a short term (24 hour) percolation of 1.5 times the sum of the design effluent flow plus direct flow into the ditches from a 10 year design rainfall. In addition, the increase will be subject to a reduction or cancellation if serious adverse effects develop. These effects will be spelled out in the permit.

No extension of time will be granted now. Your organization should make a request for extension at least by June 30, 1973, but not before December 31, 1971.

As you now know, the additional increase in capacity is limited to that produced by existing units and no increase in flow will be provided to accommodate new construction. We fully believe that the results of your satisfying conditions 4 and 5 above will be that you will require a permitted capacity in excess of your requested amount of 2.8 mgd just to accommodate existing units.

If you satisfactorily meet conditions 1 through 7 (above), and if continued monitoring gives satisfactory results, and if the Tahoe General Plan is adopted with a sewage disposal plan providing for new construction, we would be willing to consider again, in conjunction with the Federal Water Quality Administration, your expressed desire to serve facilities not presently constructed and the necessary increase in permitted capacity to accommodate them.

H. E. BRANAGH Forest Supervisor



ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS WASHINGTON, D.C. 20575

December 30, 1970

MEMORANDUM

To:

Members of the Advisory Commission

on Intergovernmental Relations

From:

Wm. R. MacDougall

Executive Director

Subject: Annotated Bibliography on Environmental Affairs

Pursuant to County Executive Michaelian's request at the Commission's September 11th meeting, staff has prepared an annotated bibliography as to the current literature on governmental policies and problems in matters of environmental control. The attached bibliography covers environmental literature of both a general and specific nature. The central purpose, however, is to include works primarily of interest to public policy-makers and administrators.

American Chemical Society. Committee on Chemistry and Public Affairs. Subcommittee on Environmental Improvement.

Cleaning Our Environment: The Chemical Basis for Action.
Washington: 1969.

Aimed at buttressing the technical awareness of legislators, administrators, and others who must deal with environmental problems at one or more steps removed from direct involvement with the pertinent science and technology, this report has two goals: first, to set down an objective account of the current status of the science and technology of environmental improvement; second, to analyze this information and recommend a number of measures that, if adopted, should help to accelerate the sound development and use of that science and technology.

Caldwell, Lynton Keith

Environment: A Challenge for Modern Society. Garden City: The Natural History Press, 1970.

Written for the general reader, rather than the environmental specialist, the purpose of this book is to help the reader understand why new patterns of individual behavior and social action in relation to the environment has become imperative to human welfare. The message of the book is that if modern man and his civilization are to survive, administration of man's environmental relationships must become a major task of government. "Environmental administration" is given two interpretations: (1) the purposive shaping of the human environment by man himself and (2) the control of human action in relation to the environment.

Caldwell, Lynton K., ed.

"Environmental Policy: New Directions in Federal Action; A Symposium," <u>Public Administration Review</u>, Vol. 27, No. 4, July/August 1968: 301-347.

The articles in this symposium concentrate upon the more recent and coordinative aspects of environmental policy and administration, and upon those programs that are concerned with management of large and complex segments of the environment in preference to those that act only upon specific aspects of it. They describe the interaction of policy and administration in the management of selected areas of the human environment.

Caldwell, Lynton K., ed.

Environmental Studies: Papers on the Politics and Public Administration of Man-Environment Relationships. Bloomington: Institute of Public Administration, Indiana University, 1967. 4 vol.

Attempts to identify and in some measure to define the principal political problems and pressure points encountered in any public effort to control the course of environmental change. The four volumes deal with: "Political Dynamics of Environmental Control"; "Intergovernmental Action on Environmental Policy: The Role of the States"; "Research on Policy and Administration in Environmental Quality Programs"; and "Politics, Professionalism and the Environment."

California. Environmental Quality Study Council.

Progress Report. Sacramento: 1970.

The Council was directed to study, in depth, State policies affecting environmental quality, to determine whether existing approaches are adequate, and to identify "unmet or inadequately met needs, undesirable overlaps, or conflicts in jurisdiction between or among Federal, State, regional and local agencies." In addition to being charged with developing long-range environmental quality goals and recommendations, it shall also make recommendations for immediate action.

California. Governor's Conference on California's Changing Environment.

The Environmental Crisis: A Call to Action; Summary Proceedings. San Francisco: 1970.

Summarizes the discussion and recommendations on the four main topics: people and air, people and water, people and land, people and urban society.

California. Legislature. Assembly. Select Committee on Environmental Quality.

Environmental Bill of Rights. Sacramento: 1970.

The report lists the major reasons for environmental degradation, identifies the key policy issues and lays out an orderly process for assessing man's future activities in order to assure environmental protection and prevent environmental crises.

Citizens Advisory Committee on Environmental Quality.

Community Action for Environmental Quality. Washington:
Government Printing Office, 1970.

A guide for citizens who want to participate in practical action to make their communities better places to live in. Concentrates on the principal approaches, how each works, how they can work together, and what organizations and agencies one can go to for further help.

Connecticut. Governor's Committee on Environmental Policy.

An Environmental Policy for Connecticut. New Haven: 1970.

Analyzes the effect of societal functions on the environment, develops four options for adjusting to a finite environment, and makes 60 recommendations to effectuate an environmental policy. Recommendations include a state environmental policy, an executive structure to implement an environmental policy, the role of the state fiscal policy, state, regional and local planning and zoning, population adjustment, transportation, open space and conservation, education and research.

Cooley, Richard A. and Geoffrey Wandesforde-Smith, ed.

<u>Congress and the Environment</u>. Seattle: University of Washington Press, 1970.

In a series of essays from individual contributors, this book examines whether or not the American political system, particularly the Congress, can cope with the economic, esthetic, and moral problems raised by the steady deterioration of our human environment.

"The Corps of Engineers Has a Strengthened Mandate to Protect Environmental Values," Conservation Foundation Letter, August 1970: 1-12.

An old law and a new court decision: the powers of the Corps of Engineers to deal with environmental problems and how these powers might be used.

Crowell, Collier, McMillan Information Corporation.

<u>Environmental Pollution: A Guide to Current Research.</u>

New York: In Press.

A listing of on-going research in several areas of the environment, based on the files of the Science Information Exchange.

Davies, J. Clarence III

The Politics of Pollution. New York: Pegasus, 1970.

Describes how government pollution policy is made, and lays the ground-work for improvements in the policy process by analyzing the interests and ideas competing for dominance over pollution control. Part I, "The Pollution Challenge and the Legislative Response," describes the nature of the pollution problem and the growth of interest in environmental quality. Part II deals with the forces which have shaped pollution policy: Congress, the Executive Branch, public opinion, interest groups, and state and local government. The role which each has played and the interaction among these different forces is analyzed. The final section examines the major policy processes in controlling pollution--research, standard-setting, and compliance.

De Bell, Garrett, ed.

The Environmental Handbook. New York: Ballantine Books, 1970.

"To serve as a source of ideas and tactics for the 1970 teach-in, this handbook brings together students, scientists, writers and others to focus on some of the major problems of our deteriorating environment, explains the nature of ecology and, most importantly, suggests action that can be taken right now in any community, by any individual."

Degler, Stanley E. and Sandra C. Bloom

Federal Pollution Control Programs: Water, Air, and Solid
Wastes. Washington: Bureau of National Affairs, 1969.

A detailed discussion of existing federal spending, research, and enforcement programs for air, water, and solid wastes, a discussion of legislation unfinished by the 90th Congress, and a look at what the future may hold. Contains information on the water quality standards, the water and air enforcement programs, and the text of relevant federal laws.

Durrett, Eustace

"Environmental Readings," The American County, Vol. 35, No. 8, August 1970: 39.

Describes several reports that would be helpful in achieving county environmental goals.

Duesterhaus, Richard L.

"A Multicounty Natural Resource Service Center," <u>Soil</u> Conservation, February 1970: 152-153.

The Northeast Illinois Natural Resource Service Center, near Chicago, encourages seven counties to help each other find solutions to natural resource and environmental problems.

Eagle, George H.

"Ohio's Environment; the Surging 70's," Ohio Cities and Villages, Vol. 18, No. 1, January 1970: 9-11.

Higher and higher standards for environmental quality in Ohio will require more and more money as well as enabling laws for necessary state and regional authorities to more economically and realistically meet the problems.

*Environmental Law Conference Proposes National Legal Action-Information Center," <u>Conservation Foundation Letter</u>, September 30, 1969: 1-12.

Conservation law specialists meet, propose action for greater involvement of legal profession in fight for environmental quality.

"Environmental Quality Actions," <u>Outdoor Recreation Action</u>, No. 15, April 1970: 1-46.

Includes an environmental situation report, a review of the best approaches for restoring and preserving the environment and forecasts for the future.

Ewald, William R., Jr., ed.

Environment and Policy: the Next Fifty Years. Bloomington: Indiana University Press, 1968.

The authors attempt to specify steps to be taken by 1970, 1930, 2000, and 2017 to achieve man's optimum environment. They attempt to delineate the essential plans to be made in order to implement programs conceived, to personally involve the greatest number of paople, and to specify the leadership required. Each discusses the implications of his recommendations at the world, national, regional, and local levels as well as the professional expertise that will be needed to carry them out. Emphasis is placed on the steps to be taken in urban areas, but recommendations are also made for rural areas, small towns, and wilderness and open beach areas.

Ewald, William R., Jr., ed.

Environment and Change: the Next Fifty Years. Bloomington: Indiana University Press, 1968.

A collection of essentially "philosophic" papers which seek to define the human scope of the term environment, the forces of change, the competence we have so far developed to cope with change, the role of the individual and society in the future, and a recognition of the true context of the future: youth, technology and the world.

Hagevik, George

<u>Planning for Environmental Quality</u>. Monticello: Council of Planning Librarians, 1969. (Exchange Bibliography #97)

Survey bibliography, designed to familiarize anyone interested in planning with the problems, issues, institutional contexts and substantive content of the broad area which can be called planning for environmental quality.

Halstead, Walter P.

"Environmental Quality--The County Mission for the 70's,"
The American County, Vol. 35, No. 8, August 1970: 14-15+.

For reasons of economy, more efficient use of skills and resources, and more effective control, it appears that county government should give thoughtful consideration and study to the establishment of a single environmental control agency to assist and guide local governments.

Heller, Frank

"Citizens and the Environmental Bandwagon," <u>Nation's Cities</u>, Vol. 8, No. 5, May 1970: 12-13.

The current public interest and participation in environmental teach-ins, court suits, and demonstrations. touches many municipalities.

Horsfall, James G.

"Designing an Environmental Policy," Connecticut Government, Vol. 24, No. 1, Fall 1970: 6-8.

Dr. Horsfall, chairman of the Governor's Committee on Environmental Policy, describes the operations of the group and presents its major recommendations. Indiana. University. Bureau of Public Discussion.

<u>Environment, "Progress," and Quality of Life; a Study-Discussion Guide</u>. Bloomington: 1970.

Designed to acquaint the intelligent and concerned non-specialist with a survey of environmental problems, their causes, and hints at their solutions.

"Is Man Playing a Game of Environmental Russian Roulette?,"

Conservation Foundation Letter, February 23, 1968: 1-12.

Who's minding the environmental store? Who should? What don't we know? What dangers do we face? Some background and proposals for an ecological overview.

Jarrett, Henry, ed.

Environmental Quality in a Growing Economy. Baltimore: The Johns Hopkins Press, 1966.

A collection of essays dealing with the new emphasis on quality, rather than just quantity, in the management of natural resources. Includes two essays on needed improvements in policies and institutions: "New Tasks for All Levels of Government," by Norton E. Long and "Some New Machinery to Help do the Job," by Jacob H. Beuscher.

Jones, James A.

"Bloomington's Natural Resources Commission is Active," Minnesota Municipalities, Vol. 55, No. 3, March 1970: 79.

Describes the activities of the Commission, a permanent advisory body to the City Council, devoting its attention to the natural resources of the community.

Klausner, Samuel Z., ed.

"Society and Its Physical Environment," Annals, Vol. 389, May 1970: 1-115.

Contents are grouped under the headings: The Nature of the Environmental Threat; Society, Personality and Environmental Usufruct; The Economics of Common Environmental Property; Emerging Environmental Law; Organizing for Environmental Planning. Lewin, Stuart F., Alan H. Gordon and Channing J. Hartelius.

Law and the Municipal Ecology: Air, Water, Noise, Over
Population. Washington: National Institute of Municipal
Law Officers, 1970.

This report provides the city attorney with a discussion of the Federal, state and municipal regulations useful to him in forcing the polluter to clean up. Particular attention has been given to provide a range of sanctions which will be effective against all polluters whether they are within city jurisdiction, outside city jurisdiction but within state jurisdiction, or outside of both city and state jurisdiction.

Lieber, Harvey

"Public Administration and Environmental Quality," <u>Public Administration Review</u>, Vol. 30, No. 3, May/June 1970: 277-286.

A survey of the public policy and institutional reaction to the environmental crisis.

"Local Government and the Environment: How Serious Are We?,"

The Local Government Newsletter, Vol. 21, No. 9, May 1970: 1+.

If environmental problems are to be attacked seriously, it will be necessary to focus on values and the relationship of values to the problems.

"Man and His Environment: A Reading List for Municipal Officials,"

<u>Michigan Municipal Review</u>, Vol. 53, No. 7, July 1970: 155-156.

Designed to provide an introduction for municipal officials to the subject of man and his environment.

Michigan. Office of Planning Coordination. Bureau of Policies and Programs.

Environmental Quality in Michigan. Lansing: 1970.

Reports on the actions and recommendations of the Advisory Council for Environmental Quality, which was charged with harmonizing various departmental programs having environmental quality ramifications, and apprising the effectiveness of current environmental management programs and policies as well as exploring new avenues of actions.

Monola, Davis

The Fragmentation of Environmental Protection Services; Virginia Town and City, Vol. 5, No. 3, March 1970: 11.

Attempts to compartmentalize categories of pollution into a bureaucratic system treating each component as a separate entity has proven a dismal failure.

Montgomery, Hugh B.

"Environmental Analysis in Local Development Planning," Appalachia, Vol. 3, No. 3, November-December 1969: 1-11.

A consulting geologist explains why the analysis of physical resources is important in planning and how this can be carried out.

National Academy of Sciences. National Academy of Engineering.

Environmental Studies Board. Environmental Studies Group.

Institutions for Effective Management of the Environment.

Washington: 1970.

Concludes that a much greater emphasis on environmental monitoring is essential, as is the development of an Environmental Quality Index as a management tool, the establishment of a Board of Environmental Affairs within the Office of the President and a National Laboratory for Environmental Science. Proposes a new Institute for Environmental Studies to provide continuing systematic analysis in support of our efforts to deal with the environment and our national policies affecting the environment.

Oregon. Department of Planning and Development.

Resources for Development. Portland: 1964.

One element of the statewide planning study, this report was designed to develop a body of information about the existing physical resources and facilities of the state. The report describes the political structure, natural resources, land use and public land ownership, transportation and public facilities of Oregon.

Perloff, Harvey S., ed.

The Quality of the Urban Environment: Essays on "New Resources" in an Urban Age. Baltimore: The Johns Hopkins Press, 1969.

This collection of essays attempts to clarify the nature of the complex problems of the urban environment, sharpen concepts, review existing sources of information, and improve measurement tools (including measurement of alternative proposed solutions). The main purpose is to probe concepts that will be useful to scholars concerned with environmental research and to policy makers concerned with narrowing the gap between intellectual speculation and practical application.

"Pollution by State Agencies and Institutions," <u>Planning for Progress</u>, Vol. 4, Nos. 1 and 2, Spring-Summer 1970: 6-7+.

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Reports where, how, and to what extent the State's 317 agencies and 70 institutions contribute to pollution in North Carolina and includes recommendations for correction of existing problems, as well as elimination of future occurences.

"Pollution: Will Man Succeed in Destroying Himself?," Congressional Quarterly, Vol. 28, No. 5, January 30, 1970: 279-285.

Describes the emergence of the environment as one of the primary political issues of 1970--and perhaps the new decade.

Ruff, Larry E.

"The Economic Common Sense of Pollution," The Public Interest, No. 19, Spring 1970: 69-85.

Contends that we are going to make very little real progress in solving the problem of pollution until we recognize it for what, primarily, it is: an economic problem, which must be understood in economic terms.

Scheffey, Andrew J. W.

Conservation Commissions in Massachusetts; with a Supplementary Report on the Emergence of Conservation Commissions in Six Other Northeast States, by William J. Duddleson. Washington: The Conservation Foundation, 1969.

After tracing the origins of the movement, the author draws upon a variety of specific Massachusetts experiences to illustrate the commissions' growing pains and their growing influence. He describes commission successes in the acquisition and protection of open space and wildlife areas, in sparking grassroots interest in pollution control and in acting as catalyst for conservation action by other local and state agencies and by many private interests. He sees the conservation commission as a "point of departure" for the future—as an effective local mechanism for coping with a wide range of the local environmental conflicts that lie ahead.

Sherrod, H. Floyd, Jr., ed.

Environment Law Review--1970. New York: Clark Boardman Co., Ltd., 1970.

The first of a projected annual series, this book provides lawyers with recent periodical writings in the field of environmental law which are often out of their reach, scattered in big and little journals. It presents 23 law journal articles of 1968-1970 in one hard-cover volume.

Smith, Dan Throop

"Improvement in the Quality of the Environment: Costs and Benefits," <u>Tax Policy</u>, Vol. 37, Nos. 3-4, March-April 1970: 3-11.

Concludes that the costs will be substantial, varied, and in some respects subtle. The benefits will not necessarily be measurable or even in all instances positive. Some of the benefits will amount to no more than prevention of further deterioration. The ultimate benefit will simply be the chance to maintain a decent human existence.

"State Agencies Responsible for Environmental Quality," <u>Outdoor</u> <u>Recreation Action</u>, Report No. 16, July 1970: 19-28.

Identifies agencies and their major responsibilities.

"States Need More Federal Funds to Combat Pollution; Fact Sheet,"

<u>Congressional Quarterly</u>, Vol. 28, No. 15, April 10, 1970:

972-975.

States are trying to catch up on long-neglected pollution problems, but they complain the federal government is not giving them the funds they need.

The States, Playing a Crucial Role in Environmental Management, Try a Variety of Innovations in 1970, Conservation Foundation Letter, November 1970: 1-12.

The states pass a wide range of environmental legislation—a sampling of new laws dealing with land use, pollution control, agency reorganization and citizen suits to assert environmental rights.

Stepp, J. M. and H. H. Macaulay.

The Pollution Problem: Special Analysis

The Pollution Problem: Special Analysis. Washington: American Enterprise Institute for Public Policy Research, 1968.

Since interest in a specific problem does not insure that legislation and action programs will be wise, or at the least harmless, it is desirable that people interested in the pollution problem make a special effort to see its various facets in proper perspective and to understand some of the more important economic and political sideeffects of various pollution-control measures. This Analysis attempts to contribute to such understanding. Tri-State Transportation Commission.

Managing the Natural Environment: A Regional Plan for Water, Sewage, Air and Refuse. New York: 1970.

Concerned with pollution of air and water, with the search for enlarged water supplies and with the accelerating problems of solid-waste disposal, this report provides a look at the status and the needs of "regional housekeeping" both now and in the future.

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U.S. Congress. House. Committee on Government Operations.
The Environmental Decade (Action Proposals for the 1970's);
Hearings. Washington: Government Printing Office, 1970.

Hearings designed to answer the following questions:
(1) What must government do to strengthen or redirect its existing programs for environmental protection and improvement?

- (2) Which programs should be expanded, curtailed, or eliminated? How? Why?
- (3) How can programs at all levels of government be better coordinated to achieve maximum economy, efficiency, and effectiveness?
- (4) What would be the cost of new programs to protect and enhance the quality of the environment? Who should administer such programs?
- (5) How can we encourage more public participation in the consideration of proposals that affect the environment?
- (6) How can we make public agencies and officials more responsive to environmental concerns in the administration of environmental programs?
- (7) Can the public effectively protect our air and water through class action litigation?
- (8) How should the federal grant programs be strengthened to help protect and improve environmental values?
- U.S. Congress. House. Committee on Science and Astronautics. Subcommittee on Science, Research, and Development. <u>Managing the Environment</u>. Washington: Government Printing Office, 1968.

A summary of current information from the Subcommittee's hearings, consultants and staff studies on the means by which science and technology can serve the national goals of environmental quality and economic progress.

U.S. Congress. Senate. Committee on Government Operations. Subcommittee on Reorganization and International Organizations. Interagency Environmental Hazards Coordination: Pesticides and Public Policy; Report. Washington: Government Printing Office, 1966.

Summarizes the state of knowledge, analyzes the public policy issues, and presents a course of further study and action.

U.S. Congress. Senate. Committee on Interior and Insular Affairs.
A Definition of the Scope of Environmental Management.
Washington: Government Printing Office, 1970.

Develops a classification system of environmental management activities designed to create an operational definition of environmental management which encompasses those aspects of federal action in which environmental considerations are paramount.

U.S. Congress. Senate. Committee on Interior and Insular Affairs.

Law and the Environment: Selected Materials on Tax Exempt

Status and Public Interest Litigation. Washington: Government

Printing Office, 1970.

A compilation of documents which help to explain the role of private litigation in protecting the environment, the issues regarding tax-exempt status for organizations involved in environmental litigation, and comments thereon by the organizations directly affected and other interested parties.

U.S. Congress. Senate. Committee on Interior and Insular Affairs.
A National Policy for the Environment: A Report on the Need for a National Policy for the Environment: An Explanation of Its Purpose and Content: An Exploration of Means to Make It Effective; and A Listing of Questions Implicit in Its Establishment: A Special Report. Washington: Government Printing Office, 1968.

Attempts to place some of the fundamental questions concerning the need for and the elements of a national environmental policy into the arena of public debate.

U.S. Congress. Senate. Committee on Interior and Insular Affairs, and House. Committee on Science and Astronautics.
Joint House-Senate Colloquium to Discuss a National Policy for the Environment; Hearings. Washington: Government Printing Office, 1968.

Several committee and subcommittee chairmen of the House and Senate, together with other members, joined in an informal study session aimed at obviating certain jurisdictional limitations of the committees they represent. The purpose was to collaborate in a survey of policies for environmental management in order that all of the committees concerned might gain fuller knowledge and understanding of the requirements for effective legislation and overview in the environmental field.

U.S. Congress. Senate. Committee on Public Works.

The Case for National Environmental Laboratories; A Report
Prepared by the Ad Hoc NEL Concept Committee, Oak Ridge
National Laboratory. Washington: Government Printing
Office, 1970.

Proposes the establishment of (or conversion of certain existing organizations to) National Environmental Laboratories, whose missions can be broadly defined as:

(1) The development, collection, and storage of information concerning activities that affect man's environment and the dissemination of such information to all individuals, groups, organizations, and institutions that seek it; and

(2) Developing and presenting to policy makers at all levels--without recommendations--ordered sets of alternatives whose relative costs and benefits are clearly defined.

U.S. Council on Environmental Quality.

Environmental Quality; First Annual Report. Washington: 1970.

Seeks to describe the conditions of our environment, and to identify major trends, problems, actions under way and opportunities for the future. After an introduction to the concepts of environmental problems and a review of Federal organization for environmental quality, the report deals with specific problems: water, air, weather and climate, solid wastes, noise, pesticides and radiation, population and land use. Finally, the report looks at the need for international cooperation, citizen participation, and environmental education.

U.S. Department of Health, Education and Welfare. Task Force on Environmental Health and Related Problems.
 A Strategy for a Livable Environment. Washington: Government Printing Office, 1967.

The report has two thrusts: first, identifying those environmental hazards which need action now and determining what initial steps offer the most immediate beneficial return; and, second, creating a system by which new action goals can be developed and met in the future. It includes 34 principal recommendations; ten of these are action goals, ten deal with the creation of an environmental protection system, and the remainder are miscellaneous recommendations which support the goals and system.

U.S. Department of Housing and Urban Development. Office of Metropolitan Planning and Development. Office of Planning Assistance and Standards.

<u>Sediment Control; Proceedings of the National Conference</u>. Washington: Government Printing Office, 1970.

Proceedings of a conference designed to bring together key representatives of state, regional and local agencies to explore ways of combating soil erosion and sediment problems in urban and suburban areas.

U.S. President's Council on Recreation and Natural Beauty.
From Sea to Shining Sea: A Report on the American Environment—Our Natural Heritage. Washington: Government Printing
Office, 1968.

Presents proposals and recommendations which will stimulate Federal, State, local and private action to further enhance the quality of the environment and the beauty of the nation.

U.S. President's Science Advisory Committee. Environmental Pollution Panel.

Restoring the Quality of Our Environment. Washington: Government Printing Office, 1965.

A comprehensive survey of the deterioration of the various components of the environment, with recommendations for action by all levels of government to assure the lessening of pollution already about us and to prevent unacceptable environmental deterioration in the future.

"Vested Interests Disagree on How to Fight Pollution," Congressional Quarterly, Vol. 28, No. 26, June 26, 1970: 1645-1648.

The environmental crisis involves the welfare not only of all Americans but also of many of their institutions and of basic elements in the nation's economy. While many vested interests agree on the need for action, much room for disagreement exists on what should be done, how it should be done and where the power of decision should rest.

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Washington. State Planning Division. Office of Program Planning and Fiscal Management.

Environmental Quality...a Program for Washington. Olympia: 1970.

Outlines the most pressing environmental issues in the state. Presents a concept which relates the interdependencies of air and water pollution with solid waste management and with water as an expendable resource.

"Washington's Environmental Fever," <u>Nation's Cities</u>, Vol. 8, No. 5, May 1970: 8-11+.

Reviews the impact on cities of the multitude of environmental control proposals being considered by Congress.

Wickwar, W. Hardy

"Environmental Management," <u>Governmental Review</u>, Vol. XII, No. 4, November 1970: 1-4.

A brief review of the role of individuals and the various levels of government in protecting the environment.

"Will the President's Reorganization Plans Lead to Better Management of the Environment?," <u>Conservation Foundation Letter</u>, September 1970: 1-12.

Reshuffling the bureaucracy...How will the Commerce Department handle the marine environment to be entrusted to it?...How will the proposed new environmental "police force" fare?

"Air Pollution... A Critical Problem!," State Government Administration, Vol. 2, No. 11, November 1967: 4-7+.

> A survey of state actions being taken to control the problem of air pollution.

Arey, Richard W.

"Virginia Directs Attention to Air Pollution," Virginia Town and City, Vol. 2, No. 6, June 1967: 11-15.

Briefly describes the types of air pollution in Virginia and the activities of the State Air Pollution Control Board and the Local Air Pollution Control Districts.

Bueche, Kenneth G. and Morris J. Schur.

Air Pollution Control -- Selected Governmental Approaches: Possibilities for Colorado. Boulder: Bureau of Governmental Research and Service, University of Colorado, 1963.

The purpose of this study is to examine critically the role of government -- federal, state, and local -- in controlling air pollution. Its primary concern is with the metropolitan problem, and, particularly, with the appropriate governmental role with regard to metropolitan Denver.

"Civilization is the Major Cause of Air Pollution," Congressional Quarterly, Vol. 28, No. 23, June 5, 1970: 1505-1509.

> As air pollution becomes an increasingly serious problem Congress is split over the question of who should set air quality standards, states or the Federal Government. The Senate tends to back the states; the President and the House tend to back federal control.

Degler, Stanley E.

State Air Pollution Control Laws. Washington: Bureau of National Affairs, 1970.

A summary of the status of the law on air pollution control in each state, the District of Columbia, Puerto Rico, and the cities of Chicago, Detroit, New York, Philadelphia, and Pittsburgh. The administering agency and a brief listing of the subject matter of regulations is included for each state, as well as a citation of the state air pollution control law.

Delogu, Orlando E.

"Legal Aspects of Air Pollution Control and Proposed State Legislation for Such Control," <u>Wisconsin Law Review</u>, Vol. 1969, No. 3: 884-907.

A model air pollution statute that presents a comprehensive governmental regulatory scheme, and underscores the need for a partnership of government and industry in order to effectuate the goal of control.

Diamond, Roger

"Cities Have Vital Role in Air Control Board's Program-As Enforcers and Offenders," <u>Texas Town and City</u>, Vol. 57,
No. 5, May 1970: 6-7+.

Describes Texas cities' dual role in the air pollution control program: while they are imbued by the law with strong enforcement powers and responsibilities, they are also potential violators.

Esposito, John C.

<u>Vanishing Air; the Ralph Nader Study Group Report on Air</u> <u>Pollution</u>. New York: Grossman Publishers, 1970.

"...probes deeply not only the failure of legislators and administrators to develop and deploy the law against air polluters but also the tragic distortion of law and legal processes into shields for polluters against citizen participation and the public's health."

"Far-Reaching Bill Pending in Congress Would Launch Major New Attacks on Air Pollution," Conservation Foundation Letter, October 1970: 1-12.

Congress considers a tough new air pollution control law...what are its chances?...how effective would it be?...and the problem of money.

Fromson, Jeffrey

"A History of Federal Air Pollution Control," Ohio State Law Journal, Vol. 30, No. 3, Summer 1969: 516-536.

A legislative history of the Air Quality Act, designed to illustrate the importance, as well as the glaring inadequacies, of federal pollution law.

Gaston, Daniel J. and Richard W. Arey.

"Local Government and Air Pollution Control," <u>Virginia Town</u> and City, Vol. 5, No. 1, January 1970: 9-14.

Outlines the relationships between the State Air Pollution Control Board and local political subdivisions.

Goldshore, Lewis

"The Local Air Pollution Control Ordinance," New Jersey Municipalities, Vol. 47, No. 4, April 1970: 6-7+.

Explains the relationship between the state air pollution program and the existing and prospective local programs.

Griswold, S. Smith

"The States and Air Pollution," <u>State Government</u>, Vol. 43, No. 3, Summer 1970: 147-151.

Despite the certainty that they will be subjected to intensified political and economic pressures, delaying tactics, and criticism from all sides, State officials must achieve air quality goals by the adoption of strict regulation on pollution sources and diligent enforcement of those regulations.

Havighurst, Clark C., ed.

"Air Pollution Control; Symposium," <u>Law and Contemporary Problems</u>, Vol. 33, Spring 1968: 195-426.

A review of the current state of thinking and action on air pollution control. Partial contents: "State Control of Interstate Air Pollution," by Lewis C. Green.-"Legal Boundaries of Air Pollution Control--State and Local Legislative Purpose and Techniques," by Lawrence W. Pollack.

Kentucky. Legislative Research Commission.

<u>Air Pollution Control Systems; Research Report.</u> Frankfort: 1966.

Surveys the legislative, administrative, economic, and public health aspects of the problem of air pollution control. Concludes that all levels of government necessarily must be involved in a proper program of air pollution control.

Middl...n, John T.
...Clean Air...A Challenge for Counties, Ohio County News,
Vol. 20, No. 5, November 1967: 3-4+.

Stresses the importance of the county as the only existing local legislative entity that has been able to mount pollution control programs serving more than a single municipality.

National Association of Counties.

Community Action Guides for Air Pollution Control. Washington: 1966.

The national air pollution problem is many local problems put together. The purpose of these guides is to provide the necessary information to enable local governments to mobilize effective programs to meet the challenge of solving these problems.

Nevada. League of Women Voters.

"Air Pollution in Nevada," <u>Governmental Research Newsletter</u>, Vol. 8, Nos. 7 and 8, May and June 1970.

Includes inventory of pollution sources, identifiable effects of air pollution, action (or lack of) at federal, state, and local levels and glossary of terms.

New York City. Mayor's Task Force on Air Pollution. Freedom to Breathe. New York: 1966.

Recommends a comprehensive program for a far-reaching and effective campaign against air pollution, and develops a three-stage approach for implementing the program.

Northeastern Illinois Planning Commission.

Managing the Air Resource in Northeastern Illinois. Chicago: 1967.

Attempts to evaluate existing and potential air pollution problems in the Northeastern Illinois Metropolitan Area and to recommend measures for achieving and maintaining improved air quality. Special attention is given to the potential role of comprehensive land use planning in an air resource management program.

Nourse, Hugh O.

"Is There an Economic Solution to the Air Pollution Problem?," Newsletter (Bureau of Community Planning, University of Illinois) Vol. 9, No. 5, Fall 1969: 1-4.

Looking at air pollution as an external diseconomy, the author points out that the problem cannot be solved by private enterprise, but needs governmental regulation. He suggests that the problem of air pollution can perhaps best be handled as a political one, even if it is truly an economic matter.

Ridker, Ronald G.

Economic Costs of Air Pollution: Studies in Measurement. New York: Praeger, 1967.

Outgrowth of a 3 year study for U.S. Public Health Service on the economic problems of air pollution.

Rydell, C. Peter and Gretchen Schwarz

"Air Pollution and Urban Form: A Review of Current Literature; Review Article," <u>Journal of the American Institute of Planners</u>, Vol. 34, No. 2, March 1968: 115-120.

The design of our cities affects the concentration of the pollution in the air--planners must begin to design the urban form to clean the air we breathe.

Seaman, Roger G.

"Water and Air Pollution...What Do You Control First?"

Illinois Municipal Review, Vol. 46, No. 8, August 1967: 7-9+.

Urges merger of air and water pollution control on the Federal level and a greater awareness and cooperation on the local level.

Seymour, Whitney N.

"Cleaning Up Our City Air: Proposals for Combating Air Pollution Through Affirmative Government Action Programs," <u>Urban Affairs Quarterly</u>, Vol. 3, No. 1, September 1967: 34-45.

"Government has so far only thought in terms of being the traffic cop. Yet government itself is one of the major contributors to air pollution, and it has in its power the opportunity for providing some dramatic solutions to the pollution problem." Stern, A. C., ed.

Air Pollution. New York: Academic Press, 1968.

. Concerned with the cause, effect, transport, measurement and control of air pollution.

- Tozzi, John
 "Aids to Local Air Pollution Control Programs," New Jersey
 Municipalities, Vol. 47, No. 4, April 1970: 6-7+.
- U.S. Congress. Senate. Committee on Public Works.
 <u>Manpower and Training Needs for Air Pollution Control</u>;
 <u>Report of the Secretary of Health, Education and Welfare to the Congress of the United States</u>. Washington: Government Printing Office, 1970.

Surveys the manpower needs of the public and private sectors and describes what steps have been and will be taken to meet the manpower and training needs in the air pollution control field. Includes detailed information on non-Federal control agency manpower needs; the salaries paid by State, local, and regional agencies; the vacancy rate of non-Federal control agencies; the manpower needs of air pollution control by the private sector; and what training programs are available to develop personnel in the air pollution control field.

U.S. Congress. Senate. Committee on Public Works.
Progress in the Prevention and Control of Air Pollution;
Third Report of the Secretary of Health, Education and
Welfare to the Congress of the United States. Washington:
Government Printing Office, 1970.

Reports on Effects and Surveillance, which encompasses those activities necessary to meet the Nation's need for improved knowledge of the nature, magnitude, and effects of the problem of air pollution; and Control and Compliance, which encompasses those activities necessary to insure timely development and application of techniques for preventing and controlling air pollution.

U.S. Congress. Senate. Committee on Public Works. Subcommittee on Air and Water Pollution.
<u>Air Quality Criteria</u>. Washington: Government Printing Office, 1968.

Designed to summarize, in a descriptive manner, existing evidence on the nature, type, and extent of air pollution health effects. A framework is provided for evaluation of the completeness of current knowledge and additional research needs.

U.S. Department of Health, Education and Welfare. Public Health
 Service. Division of Air Pollution.
 An Air Resource Management Plan for the Nashville Metropolitan
 Area. Washington: Government Printing Office, 1965.

The object of this report is to provide information that will help the citizens and government of the Nashville Metropolitan Area understand the nature and importance of their air pollution problems and to assist in developing a course of action for improvement of air quality in the immediate future and for management of air resources in years to come. Although developed specifically for the Nashville area, the report has general use for program development and reference in many other places.

U.S. Department of Health, Education and Welfare. Public Health
Service. National Air Pollution Control Administration.
<u>Air Pollution Publications</u>, 1966-1968. Washington: Government
Printing Office, 1969.

Covers such aspects of the problem as the sources of air pollution and their control; effects of pollutants on man, fauna, flora, and materials; air quality standards; legal and social aspects; and basic science and technology.

U.S. Department of Health, Education and Welfare. Public Health Service. National Air Pollution Control Administration. <u>Guide to Research in Air Pollution</u>. Washington: Government Printing Office, 1970.

Lists projects active in the past calendar year. The <u>Guide</u> is divided into 3 parts: (1) a project list in which each domestic project is listed by state and each foreign project is listed by country; (2) a listing by subject; and (3) a listing by name of the principal investigator.

U.S. Department of Health, Education and Welfare. Public Health Service. National Air Pollution Control Administration. Guidelines for the Development of Air Quality Standards and Implementation Plans. Washington: Government Printing Office, 1969.

Furnishes guidance to the states in carrying out functions assigned to them under the Air Quality Act of 1967.

U.S. Department of Health, Education and Welfare. Public Health Service. National Air Pollution Control Administration. Manual for the Development of State Recommendations for Air Quality Control Regions. Washington: Government Printing Office, 1970.

Outlines a policy by which states may, upon their own initiative, recommend to the National Air Pollution Control Administration boundaries for air quality control regions.

Virginia. Advisory Legislative Council.
Air Pollution. Richmond: 1965.

Evaluates the extent to which air pollution is a problem and is likely to become greater, measures which might be employed to reduce this threat and the most appropriate course which the state should take.

"When Will We Have Cleaner Air?," <u>Conservation Foundation Letter</u>, January 31, 1969: 1-12.

> Countdown for clean air begins as nation gets first federal law strong enough to control air pollution: what the law provides.

Wolozin, Harold, ed.

The Economics of Air Pollution; A Symposium. New York: W.W. Norton and Co., 1966.

The aspect of the air-pollution problem which commands the economist's attention is the fact that clean air is a resource; it is either a final product or an intermediate one in the language of national accounting, and it is becoming increasingly scarce. The sum of this volume on air pollution is an application of the techniques evolved by economists to analyze economic decisions of individuals, households, business firms, and society as a whole, and an attempt to identify the areas where the techniques fail, where work must be done.

B. Power

Electric Utility Industry Task Force on Environment.

The Electric Utility Industry and the Environment: A

Report to the Citizens Advisory Committee on Recreation and
Natural Beauty. New York: 1968.

Surveys and recommends actions on the most important facets of the industry where conservative programs for improvement could and should be created; in the planning and building of transmission lines; the undergrounding of distribution lines; the urban siting of nuclear plants; the protection of air and water; and the general beautification of facilities.

"Can We Have All the Electricity We Want and a Decent Environment Too?," Conservation Foundation Letter, March 1970: 1-12.

Who decides where to put new power facilities? Who judges impact on environmental quality: Some problems and some approaches to solving a major quandary.

U.S. Congress. Senate. Committee on Government Operation.
Subcommittee on Intergovernmental Relations.
Intergovernmental Coordination of Power Development and
Environmental Frotection Act; Hearings. Washington:
Government Printing Office, 1970. 2 vol.

Hearings on legislation designed to provide a regional, intergovernmental mechanism in order to promote sound planning in electric power development and, at the same time, protect the public interest with respect to the environmental impact of such development.

U.S. Congress. Joint Committee on Atomic Energy.

Selected Materials on Environmental Effects of Producing

Electric Power. Washington: Government Printing Office,

1969.

A consolidation of several background documents dealing with the problem of meeting greater power demands while still protecting the environment.

U.S. Congress. Joint Economic Committee.
The Economy, Energy, and the Environment; prepared by the Legislative Reference Service, Library of Congress. Washington: 1970.

A background study which surveys the existing literature on various technical aspects of electric power production, with primary emphasis on the supply of the various fuels used in the production of electricity and on the environmental consequences of energy conversion. U.S. Department of the Interior and U.S. Department of Agriculture.

<u>Environmental Criteria for Electric Transmission Systems</u>.

Washington: Government Printing Office, 1970.

Provides broadly based criteria to be applied by Federal land managing agencies to design regulations and enforce contractual standards of performance in the construction and maintenance of transmission systems.

U.S. Office of Science and Technology. Energy Policy Staff...
Considerations Affecting Steam Power Plan Site Selection.
Washington: Government Printing Office, 1968.

Identifies such issues as the prospects and problems of metropolitan siting, underground transmission lines, the need to protect scenic areas and the quality of our air and water, and yet meet the nation's need for reliable, low-cost power supply.

U.S. Office of Science and Technology. Energy Policy Staff.
<u>Electric Power and the Environment</u>. Washington: Government
Printing Office, 1970.

Proposes a four-part program for resolving the apparent conflict between power needs and environmental protection. Recommends:

- (1) long-range planning of utility expansions on a regional basis at least 10 years ahead of construction,
- (2) participation in the planning by the environmental protection agencies and notice to the public of plant sites at least 5 years in advance of construction,
- (3) pre-construction review and approval of all new large power facilities by a public agency at the state or regional level, or by the federal government if the states fail to act,
- (4) an expanded program of research and development aimed at better pollution controls, underground high voltage power lines, improved generation techniques, and advanced siting approaches so as to minimize the environmental problems inherent in existing technology.
- U.S. Office of the Vice President.

Working Committee on Utilities; Report to the Vice President and to the President's Council on Recreation and Natural Beauty. Washington: Government Printing Office, 1968.

Recommendations for all levels of government, regulatory commissions, industry and its suppliers to develop a balanced program to minimize the impact of necessary utility facilities upon the quality of the Nation's environment.

C. Shore Protection

California. San Francisco Bay Conservation and Development Commission.

San Francisco Bay Plan. Sacramento: 1969.

Plan for the conservation of the water of San Francisco Bay and the development of its shoreline.

"A Classic Confrontation in California: Citizens Move to Save San Francisco Bay," <u>Conservation Foundation Letter</u>, June 9, 1969: 1-12.

A look at the problems, the pressures and a plan for wise use and conservation of a superb natural resource--San Francisco Bay, a landmark case in environmental management.

"Federal Court Decision Jeopardizes Current Efforts to Safeguard Nation's Estuaries," Conservation Foundation Letter, April 22, 1968: 1-12.

Court decision shows need for new legislation to prevent destruction of estuaries. A look at the problem, the resource, what can be done and a call for action.

Ludwigson, John O.

"Managing the Environment in the Coastal Zone," <u>Environmental</u> <u>Reporter</u>, Vol. 1, No. 1, May 1, 1970.

Includes a survey of Federal and State coastal zone organization and activities.

"Needed: Effective Management of Our Priceless Shorelines and Estuaries," Conservation Foundation Letter, May 1970: 1-12.

The nation's coastlines, another dwindling natural resource: a look at some of the problems and proposals for effective managment.

U.S. Commission on Marine Science, Engineering and Resources.
Our Nation and the Sea; A Plan for National Action.
Washington: Government Printing Office, 1969.

An intensive investigation of a broad array of marine problems ranging from the preservation of our coastal shores and estuaries to the more effective use of the vast resources that lie within and below the sea.

U.S. Commission on Marine Science, Engineering and Resources.

A Perspective of Regional and State Marine Environmental
Activities: A Questionnaire Survey, Statistics and Observations. Springfield: Clearinghouse for Federal Scientific and Technical Information, 1968.

Report of a survey of regional and State government activities and organizational arrangements for dealing with marine problems.

U.S. Commission on Marine Science, Engineering and Resources.
<u>State and Local Government Activities and Roles in Marine Science, Engineering and Development</u>. Springfield:
Clearinghouse for Federal Scientific and Technical Information, 1968.

A briefly annotated catalogue of published studies and reports on organizational arrangements and activities in marine science, engineering, and resource development in the coastal States and States bordering the Great Lakes.

U.S. Congress. House. Committee on Merchant Marine and Fisheries. Subcommittee on Oceanography. Coastal Zone Management Conference. Washington: Government Printing Office, 1969.

Conference on the organization, utilization, and implementation of the coastal zones of the United States.

Wenk, Edward, Jr.

"Productive Use of the Coastal Zone," State Government, Vol. XLII, No. 2, Spring 1969: 105-111.

Describes efforts to involve Federal, State and local governments in planned and productive use of our coastal resources.

D. Waste Disposal

American Public Works Association. Committee on Refuse Disposal.

<u>Municipal Refuse Disposal</u>. Chicago: Public Administration

Service, 1966.

The objective of this manual is to review past and present disposal practices, principally in the United States; to gather pertinent data, bearing in mind geographic and seasonal differences; describe and analyze the best current practices; broadly indicate the costs; and discuss administrative and management problems.

Association of Bay Area Governments.

Refuse Disposal Needs Study. Berkeley: 1965.

This report has two objectives:

(1) To present for the first time an objective report

dealing with the refuse disposal problem on a regional level as the basis for:

- a. An awakening of the general public and public officials to the seriousness of the refuse disposal problem and the need for immediate consideration of both long term solutions and short range improvement programs.
- b. The development of more detailed studies and plans for refuse disposal programs on the local level.
- (2) To point out the need for the initiation of more detailed studies and plans for refuse disposal programs on the local level.

Black and Veatch Co.

Solid Waste Disposal Study for the Washington Metropolitan Area. Washington: 1967.

Deals with the separate problems of individual jurisdictions as well as those that require joint or cooperative action on the part of two or more jurisdictions in several parts of the region.

Bossel, Hartmut H.

<u>Solid Waste: Problems and Solutions</u>. Santa Barbara: Mechanical Engineering Department, University of California, 1970.

Surveys the solid waste problem in the United States and other advanced societies. Discusses present methods of solid waste disposal and the necessity of developing methods of waste reduction and conversion.

California Department of Public Health.

California Waste Management Study. Sacramento: 1965.

An attempt at outlining a systematic approach for solving the overall problem of waste management in California by enabling the state to perform the following task:

- (1) To assess the present and future magnitude of the problem by projecting the types and quantities of wastes to be handled in the next 25 to 35 years.
- (2) To define the major elements of a waste management system.
- (3) To assess the suitability of system analysis and system engineering as tools for solving waste management problems in a political and legal environment.
- (4) To define studies, research, and development activities that are to be undertaken as the first step of an overall program.

Chamber of Commerce of the United States.

County-Wide Plan Controls Dayton Area Pollution Problem. Washington: 1968.

All political subdivisions in the county joined in creating a plan in which they deliver solid wastes to the

county, and the county will close all privately-owned burning dumps now in use. The plan gives industries and municipalities economical waste disposal. It also stops the blighting of land and the pollution of the air from other disposal methods.

Citizens League.

Metropolitan Area Refuse Collection and Disposal. Minneapolis: 1966.

A survey of the problems of refuse disposal in the Twin Cities metropolitan area, and recommendations for improved handling.

Colorado. Legislative Council.

Progress Report on Solid Waste Disposal. Denver: 1967.

Defines the state's role in solid waste disposal, including the need to remove any impediments to the development of economic methods of waste disposal.

George, Patricia Conway.

"Solid Waste: America's Neglected Pollutant," <u>Nation's</u> <u>Cities</u>, Vol. 8, Nos. 6 thru 9, June thru September 1970.

A four-part series which examines the dimensions of the solid waste problem, improving collection and disposal, future collection and disposal technology, and administration and current legislative proposals.

National Academy of Sciences - National Research Council.

Waste Management and Control: A Report to the Federal'

Council on Science and Technology. Washington: 1966.

Focusing on all aspects of the impact of wastes on the environment, this report concludes that public policies and institutional arrangements, and the extent to which they are supported, will largely determine the effectiveness with which the challenge of pollution is met. New technologies cannot be developed or applied without new institutional patterns. The report includes recommendations for all levels of government.

National Association of Counties. Research Foundation.
Solid Waste Management. Washington: 1969.

Ten pamphlets designed to present in clear, concise form information to help local officials and interested citizens make decisions on the planning, organization, financing, staffing, legal aspects, and operation of comprehensive areawide solid wastes management systems.

Northeastern Illinois Metropolitan Area Planning Commission.

<u>Refuse Disposal Needs and Practices in Northeastern Illinois.</u>

Chicago: 1963.

Evaluates the refuse disposal situation, estimates further needs for disposal sites over the next two decades and develops policies for the guidance of local governments in refuse disposal planning and practice.

"Our Mounting Accumulation of Solid Wastes Poses Another Threat to the Environment," Conservation Foundation Letter,
September 27, 1968: 1-12.

The nation's staggering problem of trash disposal... Congress moves, cautiously, to solve it...Some new techniques for handling wastes.

Regional Plan Association.

Waste Management: Generation and Disposal of Solid, Liquid and Gaseous Wastes in the New York Region. New York: 1968.

This study has three objectives: (1) To specify procedures by which the problems of waste generation and waste management can be explicitly incorporated in regional planning; (2) To examine the impact of alternative settlement patterns on generation of wastes, environmental quality, and costs of waste management; (3) To indicate the impact of different waste management policies on waste generation, environmental quality, and the costs of waste management.

Tasseff, Ann

"Solid Wastes Programs and Research," <u>Environment Reporter</u>, Vol. 1, No. 33, December 11, 1970.

A summary of current action and research programs.

U.S. Congress. House. Committee on Government Operations.
The Establishment of a National Industrial Wastes Inventory.
Washington: Government Printing Office, 1970.

Describes the events leading up to the establishment, on October 21, 1970, of a national industrial wastes inventory, and the use to be made of the data which would be collected.

U.S. Department of Health, Education and Welfare. Public Health Service. Environmental Health Service. Bureau of Solid Waste Management.

<u>Developing a State Solid Waste Management Plan</u>. Washington: Government Printing Office, 1970.

Describes basic features of the planning process and their utilization in the development of a state plan for its solid waste management.

U.S. Department of Health, Education and Welfare. Public Health Service. Environmental Health Service. Bureau of Solid Waste Management.

<u>Policies for Solid Waste Management</u>. Washington: Government Printing Office, 1970.

Deals with the management of solid wastes generated in urban areas. The study deals with those aspects that concern the realities and institutional activities of the present and the recent past and with appropriate courses of action for the future.

U.S. Department of Health, Education and Welfare. Public Health Service. Environmental Health Service. Bureau of Solid Waste Management.

Systems Analysis of Regional Solid Waste Handling. Washington: Government Printing Office, 1970.

Defines and performs a systems analysis of the solid waste handling problems concerning regional decision makers.

U.S. Office of Science and Technology.
<u>Solid Waste Management</u>; A <u>Comprehensive Assessment of Solid Waste Problems</u>, <u>Practices</u>, and <u>Needs</u>. Washington:
Government Printing Office, 1969.

Reviews the major problems posed by the proliferation of solid wastes from all sources--broadly classified as urban, industrial, agricultural, and mineral. The analysis of current solid waste technology covered all its aspects—public and private--with particular attention to the systems of solid waste collection and transport, processing and utilization and disposal.

Urban Institute.

<u>Urban Waste Management: The Federal Role</u>, by Elizabeth Haskell. (Working Paper 102-13) Washington: 1970.

Recommends a comprehensive waste management approach, requiring two important changes: (1) All policies for liquid, gaseous and solid wastes would be closely integrated into a unitary approach; (2) The point of control on wastes to which positive and negative incentives are applied to secure action would range across the whole waste management system.

E. Water

Cleary, Edward J.

The ORSANCO Story: Water Quality Management in the Ohio Valley Under an Interstate Compact. Baltimore: Johns Hopkins Press, 1967.

This book, written by the man who has been the executive director and chief engineer of ORSANCO since its establishment, is an account of why and how eight states in the Ohio Valley adopted an interstate compact to promote a regional program of pollution control, and what years of experience revealed about such an operation.

Cox, James L.

Metropolitan Water Supply: The Denver Experience. Boulder: Bureau of Governmental Research and Service, University of Colorado, 1967.

The underlying assumption of this study is that water supply may provide the vehicle by which a metropolitan political consciousness can be developed. Political consciousness can only be attained gradually, and it must be based upon some governmental function which, because of present day urban frustrations and inadequacies, commands the citizen's attention and excitement. With this in mind, the study explores the past, current, and future developments relevant to water supply in the Denver area.

Davis, Robert K.

The Range of Choice in Water Management: A Study of Dissolved Oxygen in the Potomac Estuary. Baltimore: Johns Hopkins Press, 1968.

The author uses a case-study of a particular problem in the Potomac River basin to gain some insight into the following questions:

- (1) How broad an array of alternative courses of action may be technologically possible in a given water quality management problem?
- (2) What analytical problems does the study of alternatives present to water resource planners?
- (3) What institutional or procedural forms of water resource planning may be obstacles that limit the range of alternatives actually considered by planners?
- (4) What kind of responsibility must be exercised by political leaders if planners are to be encouraged to explore the range of choice, and if the information so developed is to be utilized effectively in policy and program formulation?

Proceedings of a conference designed: to examine some of the major problems relating to the control and use of water in the Southeast; to take a look at some of the solutions that have proven to be successful and to evaluate some of the solutions that have been proposed that look promising.

Gere, Edwin Andrus

Rivers and Regionalism in New England. Amherst: Bureau of Government Research, University of Massachusetts, 1968.

Examines the principle and practice of regional interstate cooperation and its significance for a strengthened federal system with respect to water resources in the New England region. The study seeks to: (1) identify various federal forces involved in the process of regional interstate cooperation; (2) discern patterns these forces may create; (3) examine various mechanisms of federal influence; and (4) assess their impact.

Grava, Sigurd.

<u>Urban Planning Aspects of Water Pollution Control</u>. New York: Columbia University Press, 1969.

Analyzes water pollution control measures and "the problem of waste disposal as it imposes a constraint on the policy choices available to the urban planner."

Hartman, Loyal M. and Don Seastone.

Water Transfers: Economic Efficiency and Alternative Institutions. Baltimore: Johns Hopkins Press, 1970.

Examines the legal and institutional mechanisms and the market processes through which water rights are transferred from lower-valued to higher-valued uses, notably from agriculture to industrial or municipal use.

Heath, Milton S., Jr.

Contemporary Eastern Water Rights Regulation. Chapel Hill: Institute of Government, University of North Carolina, 1968.

A brief review of the subject of water rights law as a whole, combined with a systematic survey of the recent Eastern states legislation on the subject.

Kindsvater, C. E., ed.

Organization and Methodology for River Basin Planning; Proceedings of a Seminar Based on U.S. Study Commission— Southeast River Basins. Atlanta: Water Resources Center, Georgia Institute of Technology, 1964.

Proceedings of a seminar designed to stimulate an exchange of informed opinions regarding the state of the art of comprehensive river basin planning, with specific attention to the recently completed work of the U.S. Study Commission for the Southeast River Basins.

Kelhnofer, Guy J., Jr.

Metropolitan Planning and River Basin Planning: Some Interrelationships. Atlanta: Water Resources Center, Georgia Institute of Technology, 1968.

This study is concerned with metropolitan areas, as multijurisdictional urban communities, and with the ability they display to act as communities in deciding how to manage their common water resources. The study concludes with suggestions for improvements in the planning process that is used to guide the development of metropolitan areas and river basins. The proposed improvements are designed to assure metropolitan areas of a role that is more commensurate with the size of the stake they have in the use of the rivers that serve them.

Kneese, Allen V. and Blair T. Bower, ed.
Managing Water Quality: Economics, Technology, Institutions.
Baltimore: The Johns Hopkins Press, 1968.

A collection of essays designed to shed light on three main issues of water quality management: First, how do we determine the quality of water we want to maintain in our watercourses, both surface and underground? Second, what is the "best" system of management measures for achieving the specified pattern of water quality? Third, what are the best institutional or organizational arrangements for managing water quality?

Krausz, Norman G. P.

Intergovernmental Relationships in the Administration of Water Resources. Urbana: Water Resources Center, University of Illinois, 1968.

Objectives of the study were to: study enabling laws relating to water resources administration and establish useful classifications of the legal data to determine relationships in functional areas, procedural roles, jurisdiction and finance; appraise and evaluate governmental organization and relationships in the management of water resources; evaluate the changing relation-

ships due to increased involvement of the federal government in water quality control, flood control, water supply and recreation; assess the large numbers of special districts in Illinois whose boundaries circumscribe only a portion of the water problem area.

The League of Women Voters. Education Fund.

The Big Water Fight: Trials and Triumphs in Citizen Action on Problems of Supply, Pollution, Floods, and Planning Across the U.S.A. Brattleboro: The Stephen Greene Press, 1966.

An introduction to the role of the citizen in affecting governmental decisions on all aspects of water policies.

Maass, Arthur, et. al.

Design of Water-Resource Systems: New Techniques for Relating Economic Objectives, Engineering Analysis, and Governmental Planning. Cambridge: Harvard University Press, 1962.

Reports the results of a large-scale research program devoted to the methodology of planning or designing complex, multi-unit, multipurpose water-resource systems. Intended for engineers, economists, and administrators, the book defines the methodology of water resource planning in terms of four related steps: identifying the general objectives of design; translating those objectives into design criteria; deriving plans from the design criteria for the development of optimal water resource systems; and finally evaluating the consequences of the plans.

Martin, Roscoe C., et. al.

<u>River Basin Administration and the Delaware</u>. Syracuse: Syracuse University Press, 1960.

Concluding that an overwhelming majority of all existing governments are unequal to the tasks of water-resource administration on any save a limited, local basis, it finds in the river basin an area on which the management of a broad water-related program may appropriately be centered. This study examines river basin administration and the functions of water-resource management, and analyzes their import for the organization of government.

National Association of Counties Research Foundation.

<u>Community Action Guidebook for Soil Erosion and Sediment</u>

<u>Control</u>. Washington: 1970.

Sediment caused by careless development and construction has become one of the Nation's most serious sources of water pollution. This guidebook is designed to help local officials to organize, plan, finance, staff, and implement comprehensive sedimentation control programs.

National Association of Counties. Research Foundation.

<u>Community Action Program for Water Pollution Control.</u>

Washington: 1967.

Ten Community Action Guides prepared for use of locally elected and appointed policy-making officials.

Oregon State University. Water Resources Research Institute.
Water Law, Politics, and Economics; Seminar. Corvallis: 1965.

Proceedings of a seminar designed to acquaint the participant with the complexities of our political, economic, and social structures as they affect water resources planning and development; and to highlight those features that currently act as a deterrent to reaching the most desirable use and control of our water resources.

Pealy, Robert H.

Comprehensive River Basin Planning: The Arkansas-White-Red Basins Inter-Agency Committee Experience. Ann Arbor: Institute of Public Administration, University of Michigan, 1959.

The author assumes that major reforms will continue to be unacceptable for an indefinite period and that our basic arrangements for river basin planning and development will, for some time to come, remain much as they are now.

Proceeding from that assumption, and on the basis of an evaluation of the accomplishments and failures of the Arkansas-White-Red Basins Inter-Agency Committee, he demonstrates how it will be possible to make limited gains in river basin planning through the use of existing machinery.

Pealy, Robert H.

Organization for Comprehensive River Basin Planning: The Texas and Southeast Experiences. Ann Arbor: Institute of Public Administration, University of Michigan, 1964.

It is the author's contention that comprehensive river basin planning and organizations engaged in such planning are integral parts of the political process that determines who gets what. That is, the planning organizations and the plans they produce play a basic role in determining benefits from and who pays for river basin development. The inner workings of the two Commissions are studied from this point of view.

"River Basin Authorities: A National Solution to Water Pollution," <u>Harvard Law Review</u>, Vol. 83, May 1970: 1527-1556.

Examining various ways of controlling water pollution, the author concludes that: "The answer lies in strategically located Federal river basin authorities...With generous Federal funding for treatment of domestic wastes, and fair and efficient service charges for treating industrial effluent, this promises to be the most rapid, flexible, and efficient method for achieving the Nation's water quality goals.

Sheaffer, John R., et. al.

Metropolitan Water Resource Management as an Emerging
Specialized Technical Area; A State-of-the-Art and Literature Review. Chicago: Center for Urban Studies, University of Chicago, 1969.

Smith, Stephen C. and Emery N. Castle, ed.

<u>Economics and Public Policy in Water Resource Development</u>.

Ames: Iowa State University Press, 1964.

A collection of papers dealing with the problem of economic evaluation of public expenditures for water development. Three basic categories of policy serve as organizing ideas--economic evaluation, financing and organization--and are distributed among five sections: economic evaluation, concepts; economic evaluation, quantification; financial responsibility; economics and water law; and organization.

U.S. Congress. House. Committee on Government Operations.
View of the Governors on Tax Incentives and Effluent Charges
(Water Pollution Control and Abatement). Washington:
Government Printing Office, 1966.

Summarizes the opinion and comments which the Committee received from the Governors of each State and territory concerning the use, by the States, territories, and the Federal Government, of tax incentives and effluent charges, to accelerate water pollution abatement by industry.

U.S. Congress. Senate. Committee on Public Works. Subcommittee on Air and Water Pollution.
Operation and Maintenance of Municipal Waste Treatment Plants;
Report to the...by the Comptroller General of the United States. Washington: 1969.

A review designed to obtain information regarding
(1) the manner in which the Federal Water Pollution
Control Administration complies with requirements of the

Federal Water Pollution Control Act to obtain and consider applicants' provisions for insuring proper and efficient plant operation and maintenance and (2) the existence, nature, extent, and causes of plant operating and management problems.

U.S. Department of Health, Education and Welfare. Public Health Service. Environmental Health Service. Bureau of Water Hygiene.

Community Water Supply Study: Analysis of National Survey Findings. Washington: 1970.

Reports on the findings of a study designed to assess:
(A) the status of drinking water quality (B) water supply system facilities and (C) bacteriological surveillance programs in urban and suburban areas in nine regions of the country.

U.S. Department of the Interior. Federal Water Pollution Control Agency.

The Cost of Clean Water. Washington: Government Printing Office, 1968. 4 vol.

Vol. I presents initial estimates of the national requirements for and the cost of treating municipal, industrial and other effluent during fiscal years 1969-73 to meet * water quality standards established by federal legislation, and comparable levels for intra state and coastal waters. Vol. II contains descriptions and analyses of the various subject areas which form the basis for the cost estimates reported in Vol. I. Vol. III (Industrial Waste Profiles) consists of 10 studies of major waterusing industries which describe the costs and effectiveness of alternative methods of reducing industrial wastes. Vol. IV (State and Major River Basin Municipal Tables) includes, for the 50 states and the Water Resources Council river basins, tables showing the breakdown of · estimated construction costs, sanitary sewers, and operation and maintenance costs.

U.S. Department of the Interior. Federal Water Pollution Control Administration.

The Cost of Clean Water and Its Economic Impact. Washington: Government Printing Office, 1969. 4 vol.

Vol. I updates the 1968 analysis of costs, and concludes that the current and expected short-run rate of investment in municipal waste treatment facilities is inadequate to meet water quality improvement requirements by 1973.

Vol. II provides supporting summary data from the 1962 and 1968 Federal Water Pollution Control Administration

Municipal Waste Treatment Inventories, and the State water quality standards implementation plans. In addition, the Appendix contains State and industrial comments on the 1968 report. Vol. III, Sewerage Charges, addresses itself to methods of financing waste water collection and treatment systems and discusses the considerations pertinent to the selection of a user charge program by local governmental units as a means for raising needed revenues. Vol. IV is an industrial waste profile of the organic chemicals industry.

U.S. Department of the Interior. Federal Water Pollution Control Administration.

The Cost of Clean Water: Economic Impact on Affected Units of Government. Washington: Government Printing Office, 1968.

Presents and evaluates the available data dealing with the requirements of state and local governments to achieve the desired water quality standards for beneficial water uses. Relates the requirements for sewage treatment plant construction in perspective to other competing projects confronting the affected units of government; and appraises the major financial and legal problems which will be encountered in implementing the Water Quality Standards.

U.S. Department of the Interior. Federal Water Pollution Control Administration.

The Economics of Clean Water. Washington: Government Printing Office, 1970. 3 vol.

The definition of a rate of investment that will close the gap for municipal and industrial waste treatment within a five year period, given the continued pertinence of today's regulatory and technological conditions. Detailed studies of the impact of the inorganic chemicals industry and of concentrated animal populations are submitted as separate sub-reports. The report considers several issues germane to the policy decisions required with the expiration of current municipal grants legislation.

U.S. Department of the Interior. Federal Water Pollution Control Administration.

State and Interstate Programs for Water Pollution Control; Digest of FY 1969 State Program Plans. Washington: Government Printing Office, 1969.

Prepared in response to State water quality administrators for the purpose of exchanging pertinent program information among the States.

U.S. Department of the Interior. Federal Water Pollution Control Administration.

Water Pollution Control, 1969-1973: The Federal Costs; A Report to the Congress. Washington: Government Printing Office, 1968.

Cost estimates for the Federal Water Pollution Control Administration's efforts in carrying out the provisions of the Federal Water Pollution Control Act.

U.S. Department of the Interior. Office of Water Resources Research.

Benefits from Integrated Water Management in Urban Areas-The Case of the New York Matropolitan Region. Springfield: Clearinghouse for Federal Scientific and Technical Information, 1969. paging varies

The NYMR has a water network of over 400 separately managed agencies that exhibit varying connectivities to each other. The aim of this analysis is to appraise the composit performances of the regional system, the subregional systems during the record drought of 1962-1966. Concludes that a major shift away from the present managerial structure toward greater integration appears likely. Although this report focuses on one region, the findings and methodology are applicable to the many multi-source, multi-sink water networks servicing urban regions.

U.S. General Accounting Office.

Examination into the Effectiveness of the Construction

Grant Program for Abating, Controlling and Preventing Water

Pollution. Washington: Government Printing Office, 1969.

This review was directed primarily to an evaluation of the Federal Water Pollution Control Administration's policies, procedures, and practices relative to the planning and implementation of its construction grant program.

U.S. Water Resources Council.

'The Nation's Water Resources: The First National Assessment of the Water Resources Council. Washington: Government Printing Office, 1968. paging varies

An assessment of the water supply-demand outlook of each of the water resources regions of the U.S., designed to keep the Executive Branch, the Congress, and the public informed of current and projected regional and national water and related land resources needs and of current and prospective public action necessary to meet those needs.

**Washington County, Oregon Turns on to Clean Water for Life, **

The American County, Vol. 35, No. 8, August 1970: 16-18+.

Describes Washington County Commissioners' successful design and promotion of a county sewerage treatment facility that merged 26 independent sanitary districts and sewer programs of nine cities, plus 18 private sewer systems.

White, Gilbert F.

A 150 3

<u>Strategies of American Water Management</u>. Ann Arbor: University of Michigan Press, 1969.

Attempts to determine how water management decisions are made in order to find more suitable means of manipulating the natural water system.

Wisconsin. University. Water Resources Center.

<u>Economic Incentives and Water Quality Management Programs</u>,

by Ved Prakash and Robert H. Morgan, Jr. Madison: 1969.

Examines several methods of achieving improved water quality: direct regulatory practices; positive economic incentives such as tax preferences, loans, and grants; effluent charges for quality control purposes as well as a source of financing water quality management programs.

REPORT ON NEVADA ENVIRONMENTAL LAW

BY

THE ENVIRONMENTAL POLLUTION CONTROL COMMITTEE,
NORTHERN DISTRICT

* * *

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Summary of Nevada Environmental Law, Specifically Solid Waste Disposal

N.R.S. 40.140, defining nuisance and providing for actions for abatement and damages, represents the common law remedy that has traditionally shaped private environmental law. The Nevada statute states that anything which is injurious to health or indecent and offensive to the senses or an obstruction to the free use of property so as to interfere with the confortable enjoyment of life or property, is a nuisance and the subject of an action for abatement and/or damages. The Nevada case law preserves the traditional impediment to actions by private individuals to abate public nuisances, to the effect that in the absence of a clear showing by the individual that he has sustained or will sustain a special and peculiar injury irreparable in its nature and different in kind from that sustained by the general public, such actions cannot be maintained.

In N.R.S., Chapter 202, dealing with crimes against health and safety, Section 180 thereof provides that deposit of any unwholesome substance along highways or routes of public travel, or on land or water bodies, shall be deemed a gross misdemeanor. No judicial interpretations exist of this statute.

Chapter 202 of N.R.S., dealing with crimes against health and safety, defines in Section 450, Public Nuisances, as, to-wit: A crime against the order and economy of the State and more specifically in Subsection 3 thereof, every act unlawfully done and every omission to perform a duty which act or omission, among other things, in Subdivision (C) thereof "shall unlawfully interfere with, befoul, obstruct or tend to obstruct, or render dangerous for passage, a lake, navigable river, bay, stream, canal, ditch, millrace or basin, or a public park, square, street, alley, bridge, causeway, or highway." Or, in Subsection

(D) thereof, "shall in any way render a considerable number of persons insecure in life or the use of property" is defined to be a public nuisance. There have been no judicial decisions on the subject of criminal public nuisances.

N.R.S. Chapter 266, dealing with the incorporation of municipalities by general law, in Section 335 provides for power of the city council to define, declare, and abate nuisances and more specifically to require the owners of real property to remove harmful materials that may be considered within the scope of nuisances. There are no judicial decisions on municipal powers in this respect.

In Chapter 266 of N.R.S., Section 280, dealing with further powers of the city council, provides that that body may regulate and prevent the depositing of garbage or other solid waste in any street, avenue, alley, park, or public ground.

Section 205 of N.R.S., Chapter 269, dealing with unincorporated municipalities having a voting population of 600 or more, authorizes the town board or board of county commissioners to determine what shall be nuisances in any unincorporated town or city and provide for removal of same. There are no Nevada judicial decisions specifically interpreting Sections 205 or 210 of N.R.S., Chapter 269, in the environmental context. N.R.S. Chapter 269 defines, in Section 210 thereof, nuisances and provides for an abatement procedure by the appropriate sheriff or constable.

N.R.S. Chapter 318, dealing with General Improvement Districts, in Sections 116, 142, and 170 thereof, provide generally powers to the district to furnish sanitary facilities, garbage collections services, and water sewage systems. There is no case law on the foregoing sections of the General Improvement District law in N.R.S. Chapter 318.

N.R.S. Chapter 444.210, dealing with garbage and refuse disposal, defines garbage, provides that every person who deposits garbage on a public way or upon public property, is guilty of a misdemeanor. There are no judicial interpretations of Section 210.

N.R.S. Chapter 455, dealing with excavations, generally requires the erection of fences or other safeguards around shafts, excavations or the like, when dug or sunk for the purpose of mining, water supply, or for any other purpose which conceivably could include solid waste disposal. This Chapter has produced a considerable body of interpretative case law. However, the judicial decisions do not explicitly deal with the problems of solid waste disposal, but rather with the duties or other obligations imposed upon owners or operators of mines, irrigation works, or other excavations by virtue of the above fencing requirements.

N.R.S. Chapter 456, dealing with fumigating materials, provides that the Chapter is applicable to only incorporated cities and towns, and that it shall be unlawful for any person to use any gas, poisonous liquids, or other like substances dangerous to human life or health except in the manner provided by statute, which essentially is provision for investigation by appropriate health officer and the obtaining of a permit. There is no case law on N.R.S. Chapter 456.

N.R.S. Chapter 475, dealing with crimes and responsibilities concerning fires, in Section 200 thereof, provides that any person or entity operating a garbage or trash dump shall provide for such conditions as will reasonably promote safe operation and safeguards against the escape of fire. There are no judicial interpretations of this section.

N.R.S. Chapter 518, dealing with mine safety and health, provides in Sections 330 and 340 thereof for the

requirements of equipping of mining machinery with certain dust control or sprinkling devices in order to prevent the escape of dust or other pulverized waste from mining operations into the atmosphere. An exemption is provided for those mines employing less than ten men or for those chutes that are loaded in the open air. Section 380 of N.R.S. Chapter 518 provides for the establishment of dust control programs in milling, crushing, and mineral processing operations to be enforced by the Nevada Inspector of Mines. There are no decisions interpreting the foregoing sections of N.R.S. Chapter 518.

Title 50 of N.R.S., dealing generally with the subject of animals, provides in Chapter 575 for certain miscellaneous provisions. Section 40 thereof, dealing with the fencing or safeguarding of poisonous solutions dangerous to livestock, imposes civil liability upon any person who shall cause to be dumped any solution, waste, or other thing of a liquid nature, injurious to livestock, into a ditch, flume, reservoir, or any similar place or conduit. There are no decisions interpreting this particular statute.

The preceding summary may be viewed functionally, that is, in terms of the substantive law; or structurally, that is, in terms of the various levels of local governments or hierarchies through which the substantive law may be implemented.

Summary of Board of Health Regulations For Environmental Protection

Water Pollution Control Regulations, adopted July 16, 1957; amended July 1, 1967:

- 1. Require a permit to be obtained from the Health Division for the construction, installation, or operation of new sewers, disposal systems or treatment works and modifications to existing ones.
- 2. Prohibit issuance of such permits where pollution or a health hazard might result.
- 3. Allow modification or revocation of permit when degredation results.
- 4. Prohibit individual disposal systems within 200 feet of a sewerage system or where soil conditions, water table, or other factors preclude safe operation.
 - 5. Prohibit cesspools.
- 6. Provide that "no person shall hereafter contaminate or otherwise alter the physical, chemical or biological properties of any waters of this State so as to create a nuisance or render such waters actually or potentially harmful or detrimental or injurious to public health, safety, or welfare, or to domestic, agricultural, commercial, industrial, recreational, or other legitimate use, or to livestock, wild animals, birds, fish, or other aquatic life, except as specifically permitted by these regulations, or by a permit granted pursuant hereto; any discharge which is in violation of such permit or is not in accord with the use for which such waters have been classified or which causes water quality to exceed the standards adopted by the Board shall be deemed a violation of this section."
- 7. Establish procedures for notice of violation, fair hearings before the Board of Health, emergency orders, and

other necessary details.

8. Establish specific water quality standards for 46 portions of watercourses within the State.

Water Supply Regulations, adopted January 8, 1952:

- 1. Require a permit from the Health Division for construction of domestic water supply systems.
- 2. Require that all water provided for such use meet current requirements of the U.S. Public Health Service.
- 3. Establish certain minimum requirements for sources, pumps, distributions systems and addition of chemicals.
 - 4. Require a permit for bottled water distribution.

Regulations Governing the Lake Tahoe Watershed, adopted January 29, 1958; amended July 12, 1960, and September 22, 1967:

- 1. Require a permit from the Health Division prior to construction of any building or water, sewerage or drainage system within the Lake Tahoe Watershed, or for any shoreline or other alteration below the high water level of the lake.
- 2. Allow construction of commercial or public facilities only if adequate service is available to an approved sewer collection system and treatment plant with effluent disposal.
- 3. Establish minimum requirements for approval of permits, particularly regarding sewage disposal.
 - 4. Establish minimum requirements for subdivisions.
- 5. Prohibit discharge of sewage, sewage effluent, trash, debris or waste of any kind into Lake Tahoe.
- 6. Set guidelines for piers, docks, marinas, fills, removal of sand or gravel, or shoreline alterations. Generally permits are prohibited if the proposal:
 - (a) adversely affects the aquatic environment,

- (b) adversely affects water quality,
- (c) results in deterioration or degeneration of the physical environment,
- (d) impairs or interferes with natural circulation of water,
- (e) interferes with beneficial uses of the public lands and waters,
 - (f) or is a navigation or safety hazard,
 - (g) is based on false information,
- (h) if the proposal would or does constitute a device to increase the area of water front lands by encroaching upon the surface area of Lake Tahoe below the 6229.1 foot contour line.
- 7. Require boat toilets to be equipped with devices to preclude discharge except into an on-shore collection device.
 - 8. Provide for variances under special circumstances.

Air Pollution Control Regulations, adopted November, 1970:

- 1. Require prior approval to construction of possible contaminant sources and equipment thereon.
 - 2. Require registration of all emission sources.
- 3. Prohibit discharge into the atmosphere of any air contaminant darker than Ringleman 1.
- 4. Prohibit open burning except under certain specified circumstances.
 - 5. Limit incinerator use to certain approved types.
- 6. Prohibit the causing of controllable particulate matter to become airborne.
- 7. Establish limits on process weight rates for particulate matter from industrial sources.
- 8. Restrict emission of sulfur from primary nonferrous smelters.

- 9. Limit emissions of particulate matter from fuel burning equipment.
- 10. Establish certain testing criteria and provide confidentiality to protect trade secrets.
- 11. Limit sulfur content of commercial fuel oil to
 1% by weight.
- 12. Prohibit evaporation, leakage and discharge of volatile compounds into the ambient air.
- 13. Create restrictions on the storage of gasoline and other petroleum distillates.
- 14. Prohibit dilution as a solution to pollution except to reduce odor.
 - 15. Prohibit odorous discharges.
- 16. Establish criteria for the reduction of animal matter.
- 17. Prohibit operation of a motor vehicle equipped with pollution control devices unless such devices are in place and operating.
- 18. Prohibit a gasoline powered vehicle to be operated which emits visible smoke.
- 19. Set standards for the operation of Diesel powered vehicles dependent on date of manufacture and altitude of operation.
- 20. Authorize emergency procedures when health and safety are endangered.
- 21. Allow non-complying sources to submit plans for compliance. All sources must comply by December 17, 1973.

Radiation Control Regulations, adopted January 9, 1962:

- 1. Provide for registration of sources of ionizing radiation.
- 2. Establish permissible doses, levels and concentrations.

- 3. Users shall conduct surveys, supply personnel monitoring equipment, maintain records of exposures and report thefts and losses and excessive exposures.
 - 4. Require posting of warning signs and labels.
- 5. Prohibit release of radioactive material into the air or into a sanitary sewerage system, except under certain circumstances.
 - 6. Set certain restrictions on x-ray installations.

Sanitary Landfill Regulations:

- 1. Establish minimum standards for location, operation and maintenance of sanitary landfills.
- 2. Require preservation of the quality of underlying ground or surface waters.
- 3. Require avoidance of odors, adequate water and firefighting equipment, control of paper scattering, control of surface runoff, daily fill, other covering, fencing.
 - 4. Prohibit burning.

Summary of Nevada Air Pollution Law

Chapter 445 of the Nevada Revised Statutes provides the enabling legislation for Air Pollution Control in the State of Nevada.

N.R.S. 445.445 provides that the department of health, welfare and rehabilitation is designated as the air pollution control agency of the state for the purposes of:

- Adopting through the state board of health state minimum air pollution abatement rules and regulations, and
- 2. The Federal Act, insofar as it pertains to state programs, and is further authorized to take all action necessary or appropriate to secure this state the benefits of the Federal Act.

N.R.S. 445.445 then provides authorization for the department of health, welfare and rehabilitation to: Cooperate with the secretary and other agencies of the Federal Government, other states, interstate agencies, local governmental agencies and other interested parties in all matters relating to air pollution control in preventing or controlling air pollution; and to apply for and receive funds made available to the department under the Federal Act; to recommend measures for control of air pollution and to certify to the appropriate federal authority that facilities are in conformity with the state program and requirements of control of air pollution.

Then, under 455.455, it is provided that the department of health, welfare and rehabilitation, through the state board, may: Promulgate, amend and enforce reasonable rules and regulations and delegate authority to enforce state rules and regulations to air pollution control districts, counties,

cities and towns.

The act further provides that districts, counties or cities may adopt laws, ordinances, rules and regulations to control air pollution and may enforce the same, and these rules and regulations may be more restrictive than those established by state agencies.

The act further creates a state air pollution control advisory council, consisting of a member of the state board of health designated by the state board of health, and ten persons appointed by the governor who are knowledgeable in the field of air pollution, of whom two shall represent the public at large and eight represent certain interest groups more fully set forth in N.R.S. 445.465. N.R.S. 445.475 and 445.480 then provide for the term of service of the members and the allowances and expenses to be paid to the members.

The act further provides that the state board of health before it promulgates or approves any rules or regulations pertaining to air pollution control shall consult with the state air pollution control advisory council.

N.R.S. 445.490 provides for the creation of a state air pollution control hearing board, consisting of five members, appointed by the governor from the membership of the state air pollution control advisory council. Said members cannot be employees of the state or county or other political subdivision. N.R.S. 445.490 and 445.495 then provide for the term of office of the members and the allowances given to the members.

N.R.S. 445.500 provides that the county or district board of health shall appoint a county or district air pollution control hearing board. N.R.S. 445.505 provides for the manner in which the membership of the hearing boards shall be selected and the terms of office.

N.R.S. 445.510 through 445.535 sets forth the powers and duties of boards of health, together with matters relating to establishment of regulations.

N.R.S. 445.510 provides that the state board of health may act to enforce the state act only where the state air pollution control hearing board determines that a reasonable time has been allowed for action by the county or district and that an air pollution source is releasing air contaminants that cause air pollution beyond the territorial limits of the county, that the county or health district has failed to act reasonably, or that the county or district board of health specifically requests that the state board of health assume jurisdiction.

N.R.S. 445.515 then provides for the powers and duties of the county and district boards of health, including adopting rules and regulations necessary and feasible to reduce the release of air contaminants, determining the facts and making investigations, instituting legal proceedings to compel compliance with the rules and regulations, advising and consulting and cooperating with cities, counties and other states and the Federal Government, encouraging and making efforts to obtain voluntary cooperation of persons, and accepting and receiving and administering grants or other funds from public and private sectors. N.R.S. 445.520 then sets forth the notice requirements for the adoption or amendment of any rules and regulations by the state board of health or any county or district board. Then N.R.S. 445.525 sets forth in detail the facts and circumstances to be considered by the state board of health or the county or district board of health in adopting rules and regulations pursuant to N.R.S. 445.400 to 445.595; and N.R.S. 445.530 sets forth the limitations on specifications in the rules or regulations adopted.

N.R.S. 445.540 through 445.570 sets forth the procedural requirements for hearings before the county board of health, the district board of health or the state board of health, and N.R.S. 445.575 sets out the procedure for judicial review, including trial de novo. N.R.S. 445.580 through 445.590

sets out the procedure for inspection of records, and N.R.S. 445.595 sets out the penalties for violation of regulations, enjoining, abatement of public nuisances, and cumulative remedies.

N.R.S. 244.361 provides that the boards of county commissioners of the various counties of this state are granted the power and authority, by ordinance regularly enacted, to regulate, control and prohibit, as a public nuisance, the excessive emission of dense smoke and air pollution caused by excessive soot, cinders, fly ash, dust, noxious acids, fumes and gases within the boundaries of the county. The cities are given the same authority under N.R.S. 268.410.

Summary of Nevada Water Pollution Law

- A. General Provisions Against Water Pollution.

 Prohibitions against water pollution of Nevada waters are set forth in the state statutes as follows:
 - 1. N.R.S. 445.010 makes it a gross misdemeanor to deposit into any waters of the state
 pollutants such as sawdust, pulp, oils, rubbish,
 filth or poisonous or deleterious substances
 which affect the health of persons, fish or
 livestock or render such waters unpalatable or
 distasteful.
 - 2. N.R.S. 445.030 makes it a gross misdemeanor for a person operating or in charge of a waterworks furnishing water for a public use to knowingly permit any act or omission which impairs the purity or healthfulness of the water supplied.
 - 3. Provisions concerning adjustment of fluoride concentration in water is provided in N.R.S. 445.030 (2) and 445.033, et seq.
 - 4. N.R.S. 503.430 (probably superseded by N.R.S. 445.010) provides that the deposit of substances deleterious to fish in any of the waters of the state constitutes a misdemeanor. This is a fish and game statute.
 - 5. N.R.S. 244.365 authorizes suit by the boards of county commissioners against persons depositing sawdust in rivers or streams and provides for a tax levy to provide funds to carry out the provisions of the act.

- B. Sewage Control.
- 1. N.R.S. 445.031 provides for development of standards concerning effluent of treated sewage by the health division of the department of health, welfare and rehabilitation, and prohibits transport or discharge of any effluent of treated sewage not conforming to the established standards.
- 2. Sewage disposal from boats is governed by the provisions of N.R.S. 488.315, 488.325 and 488.335. It requires toilets with treatment devices meeting standards established by the health division of the department of health, welfare and rehabilitation, and enforcement by game wardens, sheriffs and other peace officers of the state. Violation is a misdemeanor.
- C. State Water Pollution Control Agency.

 N.R.S. 445.050 designates the department of health, welfare and rehabilitation as the water pollution agency of the state for all purposes of the federal Water Pollution Control Act.

 Powers and duties of the state water pollution agency are set forth in N.R.S. 445.060.
 - D. Protection of Lake Tahoe and its Watershed.
 - 1. N.R.S. 445.080, et seq., gives the department of health, welfare and rehabilitation wide authority through permits required to be issued by the agency within the Lake Tahoe Watershed for construction of dwellings, commercial buildings, domestic water distribution systems, sewage and other waste collection and disposal systems, shoreline construction of piers, breakwaters, etc., and removal of sand and gravel, deposit of fill.
 - 2. The Tahoe Regional Planning Agency,

recently created by interstate compact, N.R.S. 277.190 - 277.220, is given comprehensive planning authority within the Lake Tahoe Basin and regulation making powers connected with the planning authority. Particular reference to matters affecting water clarity and prevention of water pollution is contained throughout the compact. Article VI (a) and (f) provide:

- "The governing body shall adopt all necessary ordinances, rules, regulations and policies to effectuate the adopted regional and interim plans. Every such ordinance, rule or regulation shall establish a minimum standard applicable throughout the basin, and any political subdivision may adopt and enforce an equal or higher standard applicable to the same subject of regulation in its territory. The regulations shall contain general, regional standards including, but not limited to, the following: water purity and clarity; . . . sewage disposal; . . . piers; harbors, breakwaters or channels and other shoreline developments; waste disposal in shoreline areas; waste disposal from boats; . . . flood plain protection; . . . and watershed protection.
- (f) Violation of any ordinance of the agency is a misdemeanor."
- E. Additional Water Pollution Statutory

 Provisions. In addition to the foregoing, there are various statutory provisions having to do with specific matters or

or authority to control in the field of water and water pollution. These statutes may be found among those concerned with the State Engineer and the Public Service Commission, in the Nevada Forest Practice Act, and elsewhere.

- F. Penalty and Enforcement Provisions.
- 1. Penal provisions in the statutes mentioned herein are (a) gross misdemeanors for violation of N.R.S. 445.010 and 445.030, and (b) misdemeanors for violation of other sections.
- 2. Enforcement authority is given to the agencies particularly concerned, to the attorney general with the consent of the governor in the case of action to prevent or restrain pollution of Nevada streams (N.R.S. 445.020), and, of course, the several district attorneys in the State.
- G. Summary and Recommendation.

I believe that, except for perhaps some particular or special instances, the existing statutory provisions are adequate if properly administered and enforced to adequately protect against unwarranted or improper pollution of the waters of the state. Additional legislative appropriations for augmented administrative and enforcement personnel would probably solve existing water pollution and adequately protect against threatened future pollution, particularly in view of the present public awareness and interest in environmental protection.

The addition of monetary sanctions against water polluters is suggested as one way to add to the effectiveness of enforcement provisions of some of the statutes now on the books.

No effort has been made in this outline to do more than to indicate what principal state legislation now exists.

There may be some Nevada case law and some local governmental ordinances and regulations on the subject which are not included or mentioned herein.