

## WATER BOARD ANNUAL REPORT

1989

### Membership Status

#### Current Members

Henry P. Caulfield Jr., President  
Thomas G. Sanders, Vice President  
Thomas C. Brown  
Mark E. Casey (Senior Alternate)  
Paul E. Clopper (Junior Alternate)  
Timothy J. Dow  
Neil S. Grigg  
Ray Herrmann  
Thomas K. Moore  
Terence H. Podmore  
MaryLou Smith  
David Stewart  
Harvey Johnson (Honorary Lifetime Member)

#### New Members

Thomas C. Brown  
Paul E. Clopper

#### Resignations

James G. Kuiken

Tom Sanders and Ray Herrmann were re-appointed to additional four year terms. Mark Casey became the senior alternate. Chester Watson was not re-appointed to an additional four-year term.

## 1989 Water Board Work Plan

Evaluate the status of the following Water and Wastewater management issues and provide appropriate advice to Staff and to the City Council:

1. Water Supply Policy
  - A. Water Rights - Legal Issues
  - B. Acquisition of Water Supplies
2. Facilities Evaluation
  - A. Wastewater Treatment Plant Expansion Study
  - B. Water Treatment Plant Optimization Study
  - C. Halligan Reservoir Feasibility Study
3. Conservation Program
4. Investigate Regional Issues
  - A. Regional Water and Wastewater Facility Issues
  - B. District Relationships
  - C. Northern Colorado Water Conservancy District Cooperation
5. Other Issues as Appropriate

## Water Supply Issues

### A. Acquisition of Water Supplies

The Water Board and Staff during 1989 recommended three major water acquisitions which were approved by the City Council. In December of 1988 the City Council adopted Resolution 88-205 which set out water supply policies for the City. One of the policies in the document provides that the City maintain a water supply that is adequate to meet the water needs during the type of prolonged drought that occurs once every 50 years. To achieve this the Council directed staff to take the necessary steps to purchase 7,400 acre feet of water. In March the Water Board voted unanimously to recommend to the Council that the City proceed expediently with regard to water acquisitions.

A total of approximately 7,400 acre feet of water was purchased as a result of the Water Supply Policy. Just over \$6.25 million was spent on these purchases. The additional supply will increase the City's average annual supply to about 62,500 AF. Several of the agreements have lease back provisions that will allow the sellers to continue using the water by leasing it back from the City for the price of the annual assessments. In addition, water rates and raw water requirements were adjusted as part of the implementation of the Water Supply Policy.

### B. Water Rights - Legal Issues

#### Wilderness Water Rights

In the late fall the Water Board spent considerable time discussing the Wilderness Water Rights issue and subsequent drafts of resolutions prepared by the Council Legislative Review subcommittee.

Several pieces of legislation will be considered by Congress in 1990 that will deal with the issue of federal reserved water rights in relation to designations of additional wilderness areas in Colorado. The manner in which water rights for wilderness areas is handled is important because it could impact water rights belonging to the City. In general, reserved water rights associated with headwaters wilderness areas, or areas upstream of water development projects, do not pose a problem. The situations in which reserved wilderness rights can create a problem for Fort Collins rights are the following:

1. Specific granting of reserved water rights for the North Platte River Wilderness Area.
2. Across the board granting of reserved water rights for wilderness areas downstream of water development projects, which would include the North Platte River Wilderness Area.
3. Granting of reserved water rights to headwaters wilderness areas in a manner that establishes a precedent for an implied reserved water right in downstream wilderness areas.

Fort Collins would not be directly affected by the boundaries of new wilderness areas that are being proposed for designation. However, the manner in which water rights are handled for new and existing wilderness areas could impact the City. The wilderness area of most concern to Fort Collins is the already established North Platte Wilderness Area. Most of this area is in Wyoming with a one mile wide stretch extending into Colorado along the state boundary. A federal reserved water right for North Platte Wilderness area could directly challenge the City's water rights.

The intent of a resolution is to seek the assistance of Senators and Congressmen in protecting the City's investments in water from injury due to the assertion of federal reserved water rights for new or existing wilderness areas. The Michigan Ditch-Joe Wright system, which cost about \$17 million, and possibly other water rights, could be affected.

The Water Board voted unanimously to endorse a resolution.

#### Cash In-Lieu-of Water Rights

In April the Water Board recommended to the City Council, a change in the cash in-lieu-of water rights from \$800 to \$900 per acre foot.

Developers have the option of turning in water rights or cash when satisfying the City's raw water requirements. The cash rate, in-lieu-of water rights is periodically adjusted to reflect the market price of water rights in this area.

#### Rental Rates for City's Surplus Water

Each year after the irrigation companies have established the annual assessment rate for their water, (usually February) the Water Board recommends to the City Council the rental rates for the City's surplus water. In February the Board voted unanimously to adopt the following rental rates for 1989:

<u>Irrigation Company</u>	<u>Proposed 1989 Rental Charge*</u>
NCWCD Water (CBT)	\$ 12.00/ac-ft
North Poudre Irrigation Co.	\$ 75.00/share
Water Supply and Storage Co.	\$ 1,500.00/share
Pleasant Valley & Lake Canal Co.	\$ 70.00/share
New Mercer Ditch Co.	\$ 300.00/share
Larimer County Canal No. 2	\$ 150.00/share
Arthur Irrigation Co.	\$ 8.00/share

\* For late season rentals, rates may be adjusted to reflect the remaining yield or the prevalent market price of the water stock being rented.

## Facilities Evaluation

### Wastewater Expansion Plans

In October the City Council appointed three Council members who would work with three Water Board members on the Wastewater Master Plan Sub-Committee. Their initial charge was to:

- 1) Review the Wastewater Master Plan.
- 2) Develop recommendations for City Council approval regarding the construction components of the Master Plan.
- 3) Make recommendations to the City Council regarding funding options to accommodate the construction and to insure the costs have been allocated fairly.
- 4) Be able to explain the long-range implications of those recommendations on the various interests in the community.

### Long Range Sludge Disposal Options

During the summer of 1989, because of the strong possibility of new federal sludge regulations and the problem of not having a place to put sludge, the Water and Wastewater Utility prepared with the help of a consultant, a report which looked at a number of future options for sludge disposal. These options were reviewed and discussed by the Water Board at their August meeting.

The Water Board approved the following staff recommendations along with the Sludge Disposal Report:

1. Continue the beneficial use program.
2. Pursue the purchase of a large ranch land site for future sludge disposal programs.
3. Insure a minimum 2-year site life
4. Proceed with the transition of the Resource Recovery Farm within 1-10 years.
5. Prepare a comprehensive engineering master plan.
6. Continue to staff all transport and disposal programs.

### Water Treatment Plant Optimization Study

In February the Engineering Committee of the Water Board recommended that the Utility proceed with the design and construction of the necessary facilities at Water Treatment Plant No. 2 to increase the capacity of the plant from 64 MGD to 74 MGD as outlined in the Black & Veatch study. In addition to the recommendation of improvements necessary to increase the plant capacity 10 MGD, Black & Veatch also identified other improvements which should be considered in the near future.

The Water Board voted unanimously to endorse the recommendation of the Engineering Committee that the contract be approved.

### Halligan Reservoir Feasibility Study

The Engineering Committee of the Water Board reviewed and discussed the Halligan Reservoir enlargement study. The consultant concluded that from an engineering, environmental and permitting perspective, Halligan Reservoir can be expanded to provide between 15,000 and 40,000 acre feet of storage.

The Engineering Committee made the following recommendations:

1. The Woodward-Clyde feasibility report should be accepted as it provides a good overview of alternatives and their respective costs, advantages and disadvantage.
2. Utility staff should continue to work on the operations study to provide the yield and operation criteria needed to further evaluate the project.
3. Utility staff should continue discussions with the North Poudre Irrigation Company to develop a mutually beneficial agreement regarding the enlargement and future use of Halligan Reservoir, and if necessary, request an extension of the present agreement which provides for negotiations between the parties regarding the enlargement of the reservoir.
4. Future evaluation of alternatives should focus on those alternatives identified as most feasible in the report, including the use of roller compacted concrete at all three sites.

There was general agreement from the Board on these recommendations.

### **Water Conservation**

#### New Employee

The Utility is in the process of expanding its water conservation public education program. A full-time employee has been hired who will be devoting most of his efforts towards a more visible and effective water conservation program. In addition, he will work closely with the Water Board Conservation and Public Education Committee.

Demand Policy The Water Conservation and Public Education Committee of the Water Board met a number of times and concluded that Fort Collins recently adopted a water supply policy and it may be desirable to document the City's demand policy. They recommended that staff gather information about water demand as it relates to Fort Collins, along with a list of any areas in which staff believes there is a lack in data. Information gathered could assist the Utility and Water Board

by providing an analysis of demand by sector to show where demand management could be used, if it were to become necessary, and the feasibility of demand management;

by serving as an educational vehicle to explain that the Water Board has considered water use patterns and evaluated needed policies;

by providing guidance on the City's responsibilities to share water supplies in the region, through leasing water, etc.;

by providing an evaluation of the feasibilities of various demand management options;

by setting forth a drought response plan for the City of Fort Collins.

#### Raw Water Irrigation Policy

At its August meeting, the Water Board discussed the advantages of providing financial incentives for conversion of existing irrigation systems from treated water to raw water, particularly for developments with large greenbelt areas. The Board approved a motion 7-1 directing the staff to develop a policy that would benefit both the community at large as well as the Utility in terms of water conservation and saving plant capacity.

#### Peak Day Water Use

In July there were 4 record water use days, with City customers using a high of 60.6 million gallons on July 5th. The previous high was 55.2 on Memorial Day of 1989 and in mid-July, 1987. The water treatment plant will be expanded from 64 MGD to 74 MGD by the summer of 1990. The Water Board discussed the possibility of restrictions but decided not to pursue the issue as a full board. Instead they asked the Conservation and Public Education Committee to explore some kind of an emergency restrictions plans as a part of their committee work.

### **Regional Issues**

#### Regional Study

The Northern Colorado Water Conservancy District and Municipal Subdistrict are conducting a preliminary study to develop a plan for cooperation in providing municipal and industrial water supplies throughout the region along the Front Range, primarily north of the Denver metropolitan area. The focus of the study is on developing a regional framework to take advantage of management opportunities and economies of scale for delivery of raw or treated water to meet the future demand of those entities currently using or potentially using water from the Colorado-Big Thompson Project, the Windy Gap Project and other water supplies from Northern Colorado.

The Water Board discussed at various times the issue of regional water treatment facilities and the City's relationship with the adjacent water districts (ELCO, Fort Collins-Loveland and North Weld). Knowing of the City's efforts to develop some type of cooperative water Treatment arrangement with those districts, the NCWCD suggested that they could expand the scope of their water study to specifically address those issues, and probably at a lower cost than Fort Collins doing it on its own. The adjacent districts reviewed the proposal from the NCWCD and decided to be a part of the study. The Water Board recommended that the City participate, along with those Districts, in the regional study.

### District Relationships

A steering committee made up of Utility staff, two Council members and a Water Board representative have been meeting on a regular basis with the adjacent districts. Water Board members receive minutes from all of these meetings, and they also receive frequent updates at Board meetings.

### City of Fort Collins/Fort Collins-Loveland Transmission Line Agreement (Draft)

At their September meeting the Water Board discussed at length the draft agreement with the Fort Collins-Loveland Water District to share a transmission line. The Board's most pressing concern was the question of water quality standards. After considerable debate the Board on an 8-2 vote approved the agreement with two qualifications. They also discussed a pending agreement that would allow the District to purchase treated water from the City until they are able to expand the capacity at their treatment facility.

### Dissolution of Mountain View Sanitation District

In 1967 the City of Fort Collins entered into an agreement with the Mountain View Sanitation District stating that the City would treat wastes collected by the District, and that the District would dissolve and turn their system over to the City when their debt for the collection system was paid off. A number of issues needed to be addressed before the District could be dissolved; most of them minor and agreed to by the City. The two major issues were that District customers be granted inside City rates when they become customers of the City and that consent to annexation not be required for District customers. The Water Board, at their March meeting, unanimously approved the dissolution agreement according to the staff recommendation that the City forego the annexation question but charge out-of-city rates.

### Northern Colorado Water Conservancy District Carry-over Program

The Carry-over program with the Northern District, begun in 1985, was initiated on a trial basis and essentially it is a year-by-year evaluation of the need for carrying over or not carrying over water at the end of the season. If there is no carryover program, at the end of October of each year, it means that any water credits that are left at that time are cancelled and the water goes into the common pool. If there is a carryover policy, that balance is still alive for the users to draw on during the next spring. One of the real benefits of the program is to give the cities and the farmers flexibility; if they don't use their water they can carry it over and use it the next spring.

In June the District informed its constituents that given the extremely low water conditions, the Board of Directors decided to eliminate the CBT carry-over program for 1989-90 as they anticipated that the local storage reservoirs would be below normal levels in the fall.

At their July meeting that Water Board discussed the ramifications of the cancellation of the carry-over program since it has been very good for Fort Collins. It was stressed that it has been the City's policy to rent excess water to agriculture as was requested for those who participated.



The District emphasized that the program has not been cancelled indefinitely and will be reviewed again next year.

#### Water Bank Concept

The Fort Collins Chamber of Commerce has formed a Water Committee of which two Water Board members are in leadership roles. The purpose of the water banking idea, which emerged from the Committee, is to: 1) scare off predators from the metro area seeking Northern Colorado water; and 2) build water around management capabilities of NCWCD, or pooling CBT water versus a "bank" to buy water. The Board discussed this concept at their August meeting and will pursue it further in early 1990. A meeting of water board presidents and utility directors from Loveland, Greeley, Fort Collins and Longmont is planned in January.

#### **Other Major Issues**

##### Proposed Natural Recreation Area

The City began the National Recreation Area study as a result of a mandate contained in Public Law 99-590 which designated the upper reaches of the Cache La Poudre River as Wild and Scenic. The law stated that the City, in partnership with the Forest Service, should pursue a feasibility study to determine if Fort Collins could get an NRA designation for a lower reach of the Poudre River. Recently more emphasis has been placed on making NRAs more accessible to urban users and there is renewed emphasis on the cultural, social, educational and historic values associated with those areas. A grant was provided by the government to conduct the local study.

The portion of the river that was studied was an 18.5 mile corridor about a mile in width, from the western border of the Fort Collins Urban Growth Area to the Larimer/Weld County line. The mission of the study was to investigate the feasibility or the potential for a federal recreation designation along that stretch of the River. The 15 month study was concluded in September and indicated that it was feasible for the river section to warrant national recreation area status.

The Water Board discussed this issue at several meetings. A committee was formed to study it in more depth and make recommendations to the full board. That committee agreed in general, as did the Board, with the whole idea of a working river and enhancing it, as a worthwhile concept. However, the Board was concerned that future impacts of designation could impede the Utility's ability to use the River. They were also concerned about the management of an NRA in that the management might be making decisions about water rights and discharges that may conflict with what the City wants. Furthermore, the Utility is looking into a site for a new waste-water treatment facility and an NRA could hamper the City's ability to acquire a site downstream.

At their July meeting the Board endorsed the feasibility study with the restrictions that staff had outlined in a memo summarized here: We recommend that a position on designation not be taken at this time since there are a number of unresolved issues concerning the implications of

designation. Rather, we recommend that additional information be gathered in order to define boundaries, to develop a workable management plan, and to draft the necessary intergovernmental agreements. These three issues need to be addressed in terms of their impact on water management and wastewater treatment.

During the latter part of 1989 the City Council made a decision to appoint a citizen's task force to study NRA designation further, particularly the issue of management. A member of the Water Board was asked to serve on that committee.

#### Management Proposal for Poudre Canyon Water Treatment Plant Site

After the Poudre Canyon Water Treatment Plant was abandoned due to obsolescence, a number of ideas were generated for possible use of that very attractive piece of property. The Colorado Division of Parks and Outdoor Recreation recognized the potential to use the old treatment plant site to offer many kinds of recreational opportunities. They presented a proposal for the management and use of the site at the Water Board's January meeting.

The Division's proposed management was structured as a no-cost 15 year lease of the site divided into two phases. Phase 1 consisted of some minor improvements to the site to accommodate rafting, fishing and picnicking with activities limited to the area between the entrance and the filter building. Phase 2 proposed more substantial site improvements with expanded activities covering the entire site. At the meeting it appeared that the majority of the Board members were in favor of pursuing some kind of an arrangement with the DOP. Staff was also in favor of leasing the site but recommended a more conservative approach and suggested that certain conditions be included in the lease.

In March the Board approved a lease and management plan for the site subject to the following terms:

- 1) The term of the lease would be no longer than five (5) years, with renewal upon Water Board and City Council approval.
- 2) Any development activities would be restricted to the area between the entrance and the filter building.
- 3) The City will not be subject to any fees for use of the "developed site" (defined as the area between the entrance and the filter building).
- 4) All improvements to the site must be approved by the City prior to construction.
- 5) The Division of Parks will be responsible for the maintenance of all facilities (roads, buildings, landscaping, etc.) within the "developed site," including prevention of runoff into the River.

6) The Division of Parks will be responsible for the repair/and or restoration of any damage to the grounds or facilities or any environmental damage, including wildlife habitat and water quality.

7) The DOP will provide continuous supervision of the site to prevent vandalism and provide policing and upkeep of the grounds.

The State Parks Division was not able to begin the renovation of the site as planned when they learned that the Colorado Highway Dept. would require them to modify the entrance to the site in order to allow public access. Those modifications will cost about \$80,000 which prompted the Parks Division to ask the City for at least a 10 year lease.

At its September meeting the Water Board expressed its general support for extending the lease to 10 years subject to the option that the City give the Division a solid 5-year lease and after that the City has the option to buy it out based on 1/5 of the remaining half of that if the City should terminate the lease.

#### Revisions to Out-of-City Service Ordinance

At times staff brings to the Water Board requests for water and/or sewer service outside of the City limits. The Board had asked staff to clarify some areas related to those requests. Staff presented a draft ordinance at the Board's November meeting. The Board unanimously approved the new ordinance which contained the following changes:

(1) Owners of property eligible for annexation will be required to initiate annexation proceedings before city service will be provided.

(2) Owners of property that is not eligible for annexation may receive approval for out-of-city service from the Director of the Water and Wastewater Utility if a single connection to one or both of the City's water and wastewater facility is required.

(3) Developers requiring multiple water and/or wastewater connections for property not eligible for annexation must receive approval of both the Water Board and Planning and Zoning Board before service will be provided.

#### Gravel Ponds Proposal

Craig Harrison presented a proposal to the Water Board at their December, 1988 meeting to buy some land and gravel ponds along the Poudre River between Shields St. and Overland Trail. The acquisition, development and use of the area would be a joint effort between the Water Utility and Parks and Recreation. At that meeting there were a number of reservations expressed about the plan. A revised proposal from Mr. Harrison was presented to the Board at their March meeting. The Board recommended approval of the Gravel Ponds Proposal with several provisions. However, because of other difficulties, the project was not pursued further.

Other Actions

Reviewed and approved the method for calculating additional raw water requirements to satisfy a request from Anheuser-Busch for use of an additional 1250 acre feet of water

Set up an ad hoc committee from the Water Board to review the Distribution and Collection System and report the findings to the Board

Approved two out-of-city service requests