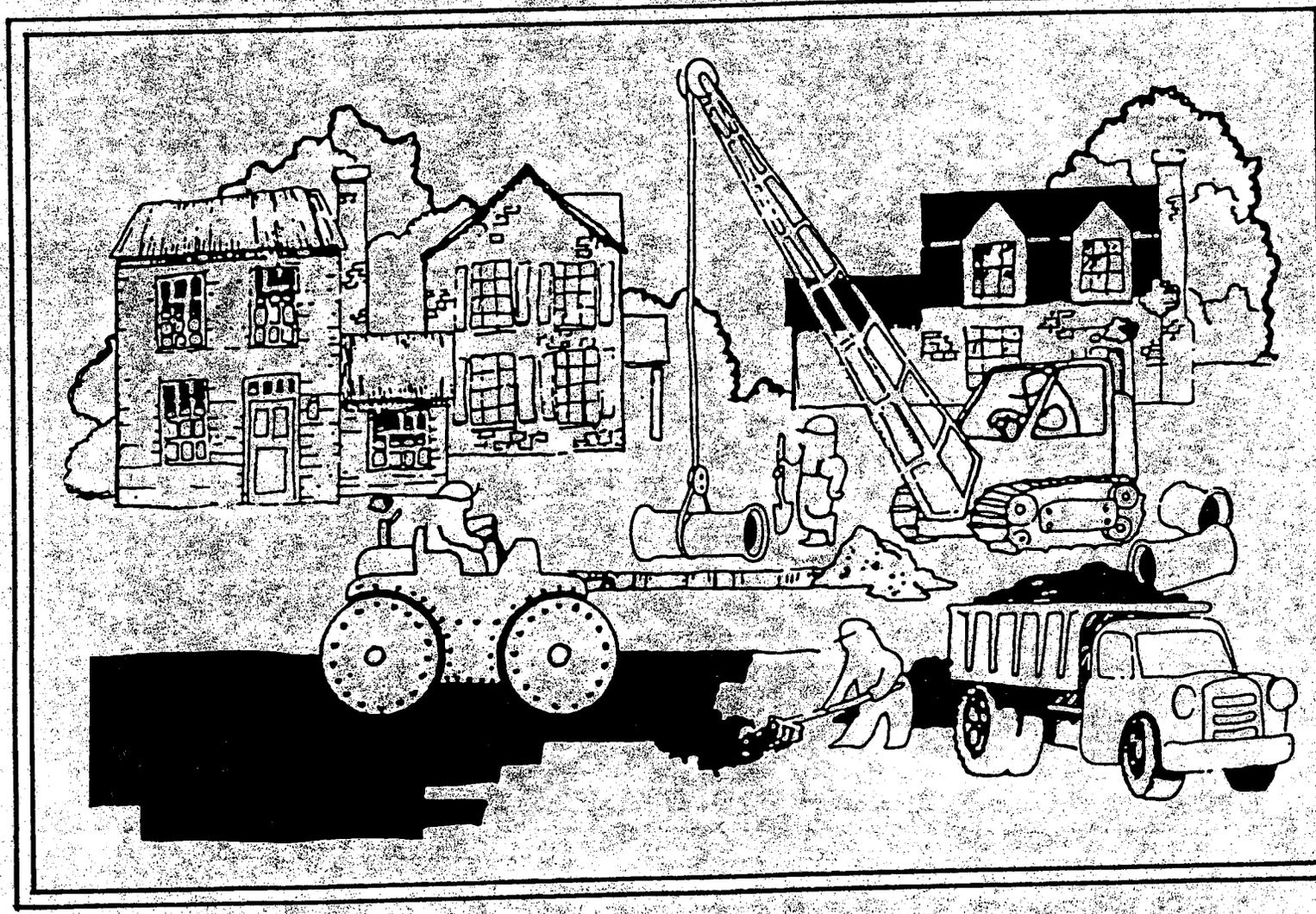


TREASURE STA ENDOWMENT PROGRAM

PROJECT ADMINISTRATION MANUAL



**MONTANA DEPARTMENT OF COMMERCE
Local Government Assistance Division**

May, 1999

CHAPTER 9

INVOLVING THE PUBLIC

OVERVIEW

The Legislature places strong emphasis on citizen participation in selecting TSEP projects. One of the statutory ranking criteria for TSEP applications rewards "projects that are high local priorities and have strong community support." As an applicant for TSEP funds, your community should have held at least one public hearing to encourage public involvement in the planning for your project. Many communities went beyond this minimum requirement and held additional community meetings to inform the public about their TSEP funded project and to solicit citizen comments.

It is in the best interest of TSEP recipients and the program itself, that our efforts to involve the public do not stop with the application process. This chapter describes opportunities each recipient will have to involve the public during implementation of a local TSEP project.

A. KEEPING THE PUBLIC INFORMED

There is an understandable tendency for the local officials and staff of any community to get involved in the day-to-day details of administering their TSEP project. It is easy to forget that **it is important to keep local citizens up to date on what is going on**, too. Our goal should be to keep the public informed about the TSEP project as it proceeds. On many local public facility projects, there are often plenty of "sidewalk superintendents" who are always eager to convey their impression to friends and neighbors. The best way for local officials and staff to stay ahead of the "rumor mill" is to continually make efforts to keep the public informed about what is going on and why.

Public facility projects are usually quite visible to your constituents. Utility installation and replacement projects can cause hardships on local residents. Because of this, it is of vital importance to keep the general public well informed as to street closures, delays that can be expected, and the general status of the project. A good public relations program to keep the public informed needs to be initiated prior to the commencement of construction and continued throughout the project.

Keeping people informed can help accomplish other goals related to your project, too. In many public facility projects, even with TSEP participation, there will be an increase in user charges or fees for water, sewer or solid waste. Continued publicity regarding the project helps local citizens understand why these costs must go up and makes them feel like part of the process, rather than just being on the receiving end of a higher bill or fee. Publicity

complaint is to be resolved, DOC will communicate the local government's decision to the agency or office that originally referred it to DOC for action.

Records of all citizen comments, whether in the form of letters or written notes summarizing telephoned or oral comments, should be placed in the citizen participation file for the project, along with the community's letter of reply or notes indicating how the TSEP recipient responded to the comment. Hopefully, the citizen participation file will be filled with compliments, rather than complaints.

Post-it Fax Note	7671	Date	8-01-03	# of pages	2
To	Will Snedgrass	From	Scott Sedcat		
Co./Dept.		Co.	Leg. Audit Division		
Phone #		Phone #	406-444-3122		
Fax #	406-503-5212	Fax #	406-444-9784		

COMMUNITY DEVELOPMENT DIVISION

8.94.3805

(3) Copies of the regulations adopted by reference in (1) of this rule may be obtained from the Department of Commerce, Community Development Division, PO Box 200501, Helena, Montana 59620-0501. (History: Sec. 90-6-710, MCA; IMP, Sec. 90-6-710, MCA; NEW, 1999 MAR p. 932, Eff. 3/27/98.)

8.94.3805 INCORPORATION BY REFERENCE OF RULES FOR ADMINISTERING THE 1999 TREASURE STATE ENDOWMENT PROGRAM PROJECTS (1) The department of commerce herein adopts and incorporates by this reference the Montana Treasure State Endowment Program Project Administration Manual dated May 1999 and published by it as rules for the administration of the TSEP.

(2) The rules incorporated by reference in (1) above, relate to the following:

- (a) project start up;
- (b) environmental requirements;
- (c) procurement requirements;
- (d) financial management;
- (e) civil rights;
- (f) labor requirements;
- (g) property acquisition;
- (h) public facilities construction management;
- (i) involving the public;
- (j) project monitoring; and
- (k) project closeout.

(3) Copies of the regulations adopted by reference in (1) of this rule may be obtained from the Department of Commerce, Community Development Division, P.O. Box 200501, Helena, Montana 59620-0501. (History: Sec. 90-6-710, MCA; IMP, Sec. 90-6-710, MCA; NEW, 1999 MAR p. 2761, Eff. 12/3/99.)

COMMUNITY DEVELOPMENT DIVISION 8.94.3807

- (k) project closeout;
 (l) preliminary engineering grants;
 (m) emergency grants; and
 (n) regional water system projects.
 (3) Copies of the regulations adopted by reference in (1) of this rule may be obtained from the Department of Commerce, Community Development Division, PO Box 260501, Helena, Montana, 59620-0501. (History: Sec. 90-6-710, MCA, IMP, Sec. 90-6-710, MCA; NEW, 2601 MAR P. 2019, Eff. 10/12/01.)

Sub-Chapter 39 reserved

8.94.3806

COMMERCE

8.94.3806 INCORPORATION BY REFERENCE OF RULES GOVERNING THE SUBMISSION AND REVIEW OF APPLICATIONS UNDER THE 2000/2001 TREASURE STATE ENDOWMENT PROGRAM (1) The department of commerce herein adopts and incorporates by this reference the Montana Treasure State Endowment Program 2000/2001 Application Guidelines, as amended in February 2000, published by it as rules governing the submission and review of applications under the TSEP program.

(2) The rules incorporated by reference in (1) above, relate to the following:

(a) estimated amount of TSEP funds available in FY 2000 and 2001;

(b) eligible applicants and projects;

(c) application scoring system and ranking criteria;

(d) forms of financial assistance available under TSEP;

(e) general requirements for TSEP applications; and

(f) application review process.

(3) Copies of the regulations adopted by reference in (1) of this rule may be obtained from the Department of Commerce, Community Development Division, PO Box 260501, Helena, Montana 59620-0501. (History: Sec. 90-6-710, MCA; IMP, Sec. 90-6-710, MCA; NEW, 2000 MAR P. 186, Eff. 1/28/00; AMD, 2000 MAR P. 1042, Eff. 4/28/00.)

8.94.3807 INCORPORATION BY REFERENCE OF RULES FOR ADMINISTERING THE 2001 TREASURE STATE ENDOWMENT PROGRAM

(1) The department of commerce herein adopts and incorporates by this reference the Montana Treasure State Endowment Program 2001 Project Administration Manual published by it as rules for the administration of the TSEP.

(2) The rules incorporated by reference in (1) above, relate to the following:

(a) project start up;

(b) environmental requirements;

(c) procurement requirements;

(d) financial management;

(e) civil rights;

(f) labor requirements;

(g) property acquisition;

(h) public facilities construction management;

(i) involving the public;

(j) project monitoring;

NEXT PAGE IS 8-3437 12/31/01 8-3430.3

8-3430.2 12/31/01

ADMINISTRATIVE RULES OF MONTANA

CHAPTER 3

PROCUREMENT REQUIREMENTS

OVERVIEW

This chapter provides guidance to TSEP recipients regarding state requirements that govern the procurement of supplies, equipment, construction, and professional or other services with TSEP funds. **The principal focus of this chapter is the procedures required for selection of consultants to provide project management and engineering services.** The procedures required for the selection of contractors for public facilities construction are discussed in detail in Chapter 8, Public Facilities Construction Management.

Local officials should carefully review this chapter before entering into any agreements to purchase equipment or materials or to retain the services of a consultant or contractor. In addition, **all contracts to be paid for in part by TSEP funds must be submitted to MDOC for review and approval, prior to execution.** In addition, MDOC has available a technical assistance manual called "Building It Right," which provides considerable detail regarding the selection of contractors for public facilities projects.

A. APPLICABLE STATE REQUIREMENTS

Conflict of Interest (Sections 2-2-201, 7-3-4367, 7-5-2106, and 7-5-4109, MCA) set out statutory requirements governing conflicts of interest by state or local officials and employees.

County Contracts (Section 7-5-2301 to 2308, MCA) sets out procedures for procurement by county government.

Municipal Contracts and Franchises (Section 7-5-4302 to 4308, MCA) describe the requirements for awarding of contracts by Montana cities and towns.

Under both statutes, contracts for professional, technical, engineering, and legal services are exempt from bidding requirements.

Architectural, Engineering, and Land Surveying Services (Section 18-8-201 to 212, MCA). This law establishes a qualifications-based selection procedure for architectural, engineering and surveying services costing \$10,000 or more that are funded by state and local public agencies (state agencies, local governments, school districts, special districts or authorities of local governments).

↙
(coal tax \$)

LEGISLATIVE AUDIT DIVISION

Scott A. Seacat, Legislative Auditor
John W. Northey, Legal Counsel



Deputy Legislative Auditors:
Jim Pellegrini, Performance Audit
Tori Hunthausen, IS Audit & Operations
James Gillett, Financial-Compliance Audit

March 29, 2002

Representative David E. Wanzenried
903 Sky Drive
Missoula MT 59804-3121

Dear Representative Wanzenried:

I have reviewed correspondence you provided that expresses conflict of interest concerns with the contracted engineering review by the Department of Commerce during Community Development block Grant (CDBG) and Treasure State Endowment Program (TSEP) grant or loan application evaluation. The Administrator of the Community Development Division, Department of Commerce, has also provided me with information and supporting documentation about the conflict of interest issue.

I reviewed a "sample" agreement between the department and a consulting engineer. The purpose of the agreement is for the department to obtain consulting engineering services for technical and engineering reviews of CDBG and TSEP program applications. The agreement includes a provision requiring the contractor to covenant "that it has no interest and will not acquire any interest, direct or indirect, in financing projects which would conflict in any manner or degree with the performance of its services under this Agreement."

The department provides "Guidelines For The Technical Engineering Review of the Treasure State Endowment Program (TSEP)" to the contracted review engineers. The guidelines note that each engineering firm will be provided a form that lists all projects subject to review. Each firm is to identify any projects for which they have provided consulting services for the applicant. The guidelines also state that if a firm has been involved with a project being discussed, the engineer "will not be permitted to speak on behalf of their work or the applicant, or participate in the discussion or scoring of the project". I have confirmed the documentation of the use of the conflict of interest form and the use of a summary spreadsheet by staff which summarizes all projects being reviewed and the identified conflicts of interests reported by the engineers.

While the department has taken steps to address the issue of potential conflict of interest, the "appearance" of a conflict of interest still exists. Consulting engineers who have worked for an applicant are present during the discussion of the applicant's proposal.

Representative David E. Wanzenried

March 29, 2002

Page 2

While the engineer may not speak, the engineer is involved in the evaluation of other proposals that potentially compete for approval and support and available funding.

In my opinion, the only absolute way to remove the "appearance" of a conflict of interest is to not contract with engineers for CDBG and TSEP review if they have provided engineering services for any of the applications being considered. This could be done by the department through policy or could be mandated by the passage of legislation.

I will maintain the documentation provided by the department for your review. I will also be happy to meet with you and the department if you think it would be useful.

Sincerely



Scott A. Seacat
Legislative Auditor

SAS:ADMIN-DAILY:wanzenried.ltr.doc/ke

GAO

Testimony

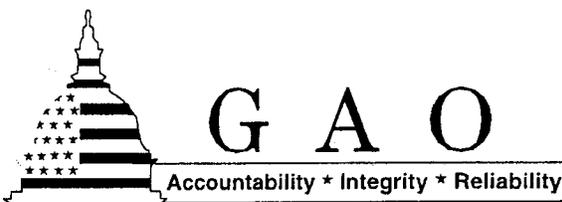
Before the Subcommittee on Water
Resources and Environment, Committee
on Transportation and Infrastructure,
House of Representatives

For Release on Delivery
Expected at 10:00 a.m. EDT
Wednesday, June 11, 2003

ENVIRONMENTAL
PROTECTION AGENCY

Problems Persist in
Effectively Managing Grants

Statement of John B. Stephenson, Director,
Natural Resources and the Environment



Rosecrest Park

Experimental Denitrifying Septic Drainfield Project



Missoula City County Health Department
301 West Alder Street
Missoula, MT 59802

23

Nitrogen Removal Performance
of
Three On-Site Alternative Wastewater
Treatment Systems in Montana

January 17, 2002

Prepared by:

Rebecca P. Dupuis, R.S., P.E.
Osprey Environmental Consulting
606 4th Avenue East
Polson, Montana 59860

Shawn D. Rowland, R.S., M.S.
Rowland Environmental Consulting
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Lake County Environmental Health Department
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Lake County Commission
106 4th Avenue East
Polson, Montana 59860

Prepared for:

Department of Natural Resources
Renewable Resource Grant #RRG-98-1071
Dept. of Natural Resources and Conservation
PO Box 202301
Helena, Montana 59620-2301

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FEB 07 2002

MT. DEPT. OF ENV. QUALITY
PERMITTING & COMPLIANCE DIV

OSPREY
*Environmental
Consulting, P.C.*

P.O. Box 491
606 4th Avenue East
Polson, Montana 59860
Phone (406)883-5603
Fax (406)883-5639

RECEIVED

JAN 24 2003

D.N.R.C.

To: Montana Environmental Health Departments and Other Interested Parties

From: Becky Dupuis
Osprey Environmental Consulting



Date: January 29, 2002

Subject: Final Report - Nitrogen Removal Performance of Three On-Site Alternative Wastewater Systems in Montana.

Please find enclosed a copy of the above referenced report. Most of you are aware of the project and hopefully you will find the information within the report useful when working with sites which require "level II treatment" wastewater systems.

The main purpose of this project was to provide nitrogen removal field data from the onsite wastewater systems monitored, but a secondary purpose was to improve access to information about onsite wastewater systems. The CD attached to the report contains the majority of the useful information reviewed for this project. Unfortunately, the new research completed and documented in the last three years since this project began is not included on the CD. But hopefully the CD will provide some very good background information about onsite wastewater systems and some ideas of where you can obtain additional information.

To qualify for "bound material" postage rates, postal regulations prohibit me from providing any recipient specific information. If you have any questions or comments please feel free to contact me. We think the results of this study are very exciting and hope you find the information both interesting and helpful.

R E C E I V E D
JAN 28 2003

MISSOULA, MONTANA
PUBLIC WORKS DEPARTMENT

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FEB 07 2002

MT. DEPT. OF ENV. QUALITY
PERMITTING & COMPLIANCE DI



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DEPARTMENT OF PUBLIC WORKS

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BICYCLE / PEDESTRIAN
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TRAFFIC SERVICES
VEHICLE MAINTENANCE

WASTEWATER TREATMENT

E-2001-0362

April 17, 2001

Tom Slovarp
Department of Environmental Quality
Planning, Prevention and Assistance Division
P.O. Box 200901
Helena, Montana 59620-0901

RE: Final Approval and Revisions to the Missoula Wastewater Facilities Plan Update 1999

Dear Tom:

Our records show that you have 2 copies of the Missoula Wastewater Treatment Plan 1999, which was formally approved by DEQ and the EPA on July 31, 2000. Attached you will find the final revisions required for approval by DEQ and the EPA. Please make the following modifications to your manual:

- Remove the entire Table of Contents and replace it with the revised version;
- Remove Chapter One in its entirety and replace with the revised version;
- Place the March 2001 amended facilities service area drawing 1-1, resolution and original drawing 1-1 at the back of chapter 1;
- Add Appendix I, J, and K (keeping the forms in the order listed at the back of Chapter One; and
- Place the "Approved 2000" sticker below the "1999" date on the front cover.

If you have any questions about the location of these revisions, please call Sandee at 523-2939.

Sincerely,

Bruce T. Bender
Director of Public Works

Enclosure: Revisions to the Wastewater Facilities Plan Update

cc: File No. 99-017

Exhibit 12

12/12/2006

Effluent changes gender of fish

By *BOONSRI DICKINSON and TODD NEFF*
Scripps Howard News Service

In 2004, David Norris reported that fish just below the Boulder, Colo., Wastewater Treatment Plant's outflow pipe were changing sex.

Two years later, the University of Colorado integrative physiology professor has expanded his study, which now involves one "Fish Exposure Mobile" research trailer in operation and a second on the way.

Science done in the trailer has verified Norris' 2004 study and shown that surprisingly low concentrations of treatment-plant effluent can change male fish into females.

The 2004 study showed that certain chemicals from pharmaceuticals and personal-care products made it through the Boulder Wastewater Treatment Plant and into Boulder Creek. Ninety percent of the white suckers swimming downstream of the plant were female. Upstream, there was an even split.

"What we see in the fish downstream is as if they are taking birth control pills," Norris said.

The female fish -- both the transsexuals and the original girls -- had smaller-than-average ovaries. The remaining males produced less sperm, showing the water effluent also has contraceptive effects, he said.

The chemicals are believed to come from excreted birth-control hormones, natural female hormones and detergents flushed down toilets and drains. In the ecosystem, they are known as endocrine disrupters, settling into cell receptors intended for hormones and garbling the body's chemical communications.

To bolster his evidence, in 2005 Norris and colleague Alan Vajda, a CU research associate, set up the Fish Exposure Mobile in a trailer borrowed from the Colorado Division of Wildlife. U.S. Geological Survey scientists Larry Barber and James Gray also are working with Norris' team, and the city of Boulder's cooperation also has been vital, the scientists say.

Where Norris and Vajda are what Barber called "world-class endocrinologists," Barber and Gray are chemists who have advanced detection techniques to the point they can spot human estrogen in concentrations as low as 0.2 parts per trillion.

They needed such exactitude because human estrogen, or 17 beta estradiol, affects fish at concentrations as low as one part per trillion - the equivalent of a pinch of salt in an Olympic pool, Norris said.

Barber said volumes of human estrogen in the pure treatment-plant effluent range from one part per trillion to about 10 parts per trillion.

The Fish Exposure Mobile, parked next to the creek on sewage treatment plant property, pulls water directly from the plant's outflow pipe and can dilute it using precise volumes of upstream Boulder Creek water.

Fathead minnows swim in two identical tanks inside, each 200 gallons. One fills with upstream creek water; the other with varying degrees of wastewater plant effluent. Such control lets researchers see how fish react to varying effluent concentrations.

They aimed to create a controlled experiment and confirm if estrogen and other compounds from the treatment plant were responsible for the fish sex change.

"The males were feminized in seven days," Norris said. "You don't need a Ph.D. to sex them."

The males have bumps on the forehead and often attack each other. The fish exposed to the effluent water lost their bumps and acted like girls. It confirmed effluent to be the culprit.

Diluting the treatment plant's effluent 50 percent feminized breeding male fish in a week to 15 days, Norris said. Some of the effects remained evident even when the wastewater plant effluent was diluted 75 percent.

"We were excited to get these results, but at the same time we're a little bit appalled at what we've seen," Norris said.

Sheila Murphy, a hydrologist with the U.S. Geological Survey in Boulder, said the Fish Exposure Mobile work has been important to counter skeptics who attribute transsexual fish in the Potomac River and other waterways to temperature changes or other environmental influences.

"What it's showing is that it's indeed from the wastewater plant," Murphy said.

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denver & the west

Effluent tipping scales on fish gender

A landmark study has found that wastewater from sewage-treatment plants in Boulder and Denver is causing gender deformities in suckers living downstream.

By Katy Human
Denver Post Staff Writer
Denver Post

Article Last Updated:09/06/2006 10:52:27 PM MDT

Wastewater pouring from sewage-treatment plants in Boulder and Denver is bending the gender of fish living downstream, a new study has found.

Some of these strangely sexed sucker fish have male and female organs, and others have sexual deformities, according to a study by University of Colorado researchers.

"It's sort of a sentinel for us," said David Norris, a CU biologist and an author of the report. "Every major city in the Western U.S. is looking at it."

The paper, published this month in the journal *Comparative Biochemistry and Physiology*, is the first peer-reviewed study documenting the reproductive problems of fish downstream from Colorado wastewater-treatment plants.

Similarly odd fish have been found in England and in the Potomac River in Washington, D.C., Environmental Protection Agency officials said.

Although gender-deformed fish have been found in Front Range streams in the past few years, skeptics argued that any number of pollution sources - even natural effects - could be the cause.

The CU scientists now say they've confirmed that wastewater effluent is to blame.

The new results raise concern about whether the stuff people dump down drains - from urine to cleaning products to cosmetics and medicines - can alter the hormonal systems of other animals, researchers said.

Healthy male minnows placed in diluted effluent from Boulder's treatment plant stopped making sperm within two weeks, said Alan Vajda, a CU research associate and another author of the new report.

Many Colorado cities and towns pull drinking water from creeks downstream of wastewater-treatment plants.

There is, however, no evidence yet that the so-called endocrine-disrupting chemicals found in wastewater are concentrated enough to cause significant problems in people, Norris said.

People are bigger than fish, he said, and don't live in water.

"The problem is, that's not the only source of this type of chemical," Norris said. "It's in our food, it's in our plastics, it's in pesticides. ... We're being bombarded all the time."

People eating fish probably aren't at risk of harmful exposure, said Larry Barber, a researcher with the U.S. Geological Survey in Boulder.

Endocrine-disrupting chemicals are at low levels in sucker filets, Barber said.

Patti Tyler, science adviser for the EPA's Denver office, said, "We're still not clear about ... whether exposure to these compounds has effects on humans."

The CU research team has been given about \$800,000 in EPA grants to continue investigating the strange fish maladies downstream from state wastewater-treatment plants, Vajda said.

Other EPA offices are also funding similar work around the country on endocrine-disrupting chemicals in waterways, Tyler said.

Also, the EPA has recommended limits for some of the chemicals, such as the nonylphenols found in cleaning products.

Boulder wastewater-plant officials cooperated with the research, helping set up a mobile laboratory on site.

"It's valuable information not only for Boulder, but for other people in this industry," said Floyd Bebler, the city's wastewater coordinator. "It's happening all over, especially in the effluent-dominated streams ... of the West."

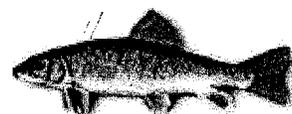
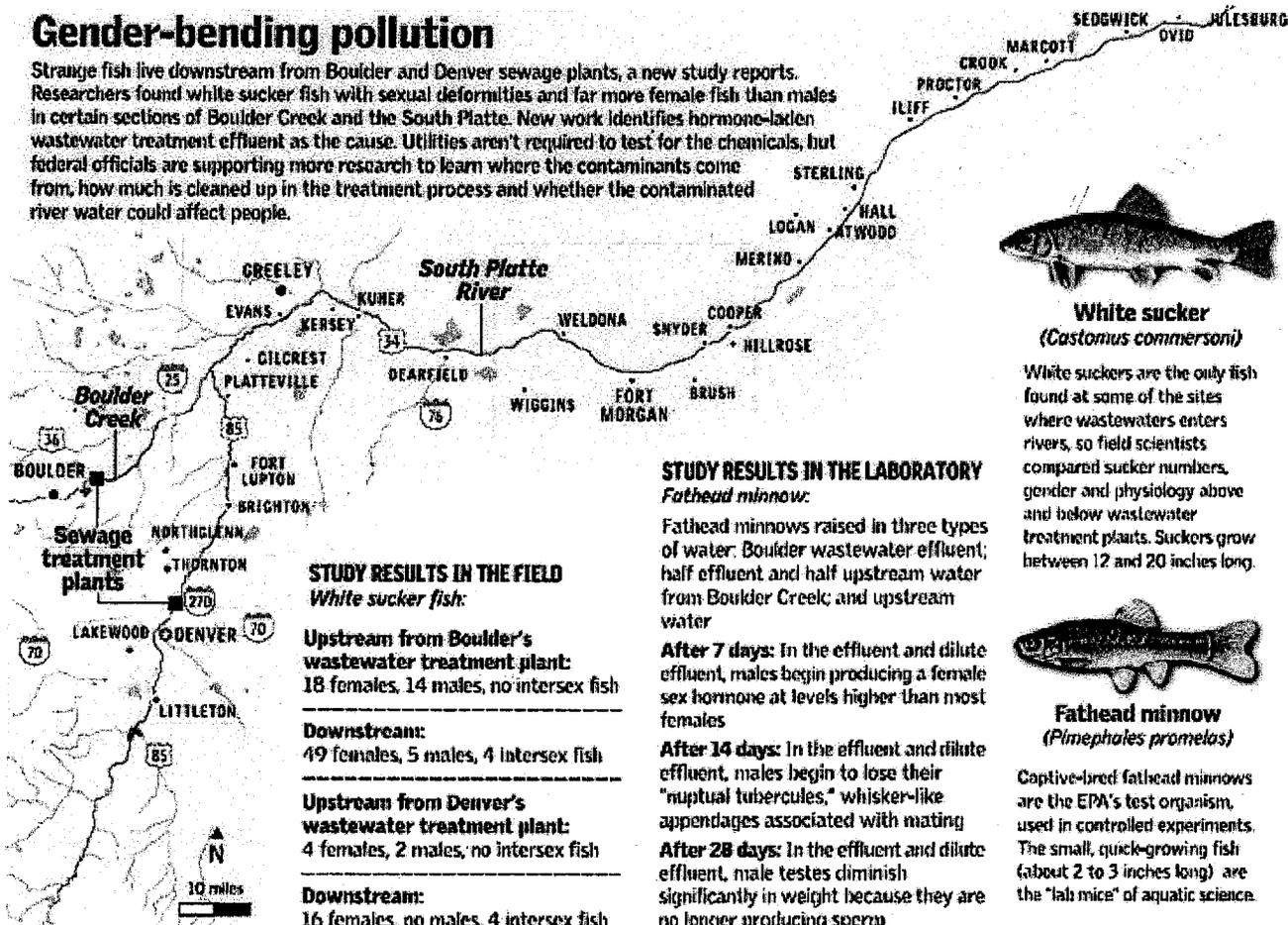
Staff writer Katy Human can be reached at 303-954-1910 or khuman@denverpost.com.

Image Viewer

Page 1 of 1

Gender-bending pollution

Strange fish live downstream from Boulder and Denver sewage plants, a new study reports. Researchers found white sucker fish with sexual deformities and far more female fish than males in certain sections of Boulder Creek and the South Platte. New work identifies hormone-laden wastewater treatment effluent as the cause. Utilities aren't required to test for the chemicals, but federal officials are supporting more research to learn where the contaminants come from, how much is cleaned up in the treatment process and whether the contaminated river water could affect people.



White sucker
(*Catostomus commersoni*)

White suckers are the only fish found at some of the sites where wastewaters enters rivers, so field scientists compared sucker numbers, gender and physiology above and below wastewater treatment plants. Suckers grow between 12 and 20 inches long.



Fathead minnow
(*Pimephales promelas*)

Captive-bred fathead minnows are the EPA's test organism, used in controlled experiments. The small, quick-growing fish (about 2 to 3 inches long) are the "lab mice" of aquatic science.

STUDY RESULTS IN THE LABORATORY

Fathead minnow:

Fathead minnows raised in three types of water: Boulder wastewater effluent; half effluent and half upstream water from Boulder Creek; and upstream water

After 7 days: In the effluent and dilute effluent, males begin producing a female sex hormone at levels higher than most females

After 14 days: In the effluent and dilute effluent, males begin to lose their "nuptial tubercles," whisker-like appendages associated with mating

After 28 days: In the effluent and dilute effluent, male testes diminish significantly in weight because they are no longer producing sperm

STUDY RESULTS IN THE FIELD

White sucker fish:

Upstream from Boulder's wastewater treatment plant:
18 females, 14 males, no intersex fish

Downstream:
49 females, 5 males, 4 intersex fish

Upstream from Denver's wastewater treatment plant:
4 females, 2 males, no intersex fish

Downstream:
16 females, no males, 4 intersex fish

Sources: David Norris, University of Colorado. Comparative Biochemistry and Physiology

11/12/24 **Deformed fish found near Colorado treatment plants**

DENVER (AP) – Fish with both male and female sex tissue have been discovered near Colorado wastewater treatment plants on the South Platte River and Boulder Creek.

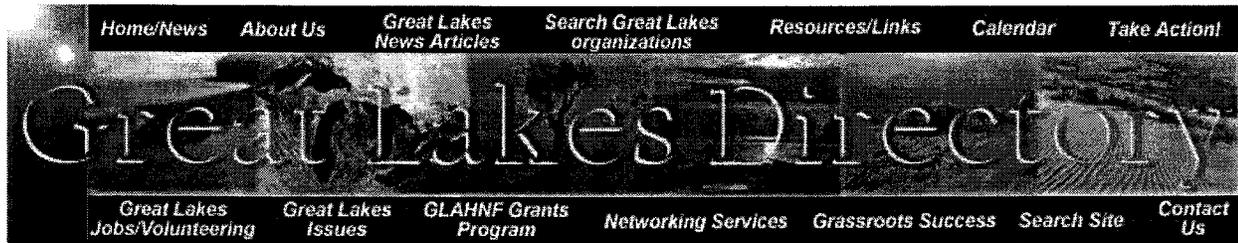
Scientists are trying to determine if chemicals that disrupt hormones, such as estrogen, are responsible for the gender-bending phenomenon.

Colorado biologist John Woodling discovered the deformed white suckers about two years ago near two wastewater discharge pipes. Female fish also far outnumber the male fish near the plants.

“This is the first thing that I’ve seen as a scientist that really scared me,” said Woodling, 58, a retired fisheries biologist with the Colorado Division of Wildlife who is now working with the University of Colorado.

Scientists haven’t pinpointed which chemicals might be causing the deformities, but endocrine disrupters that mimic or disrupt hormones, especially estrogen, are a leading suspect.

Such chemicals are believed to come from excreted birth-control hormones, natural female hormones and commonly used detergents that are flushed down toilets and drains.



EPA says one-third of rivers in survey too polluted for swimming, fishing

John Heilprin
Associated Press
10/01/2002

WASHINGTON -More than one-third of surveyed rivers and about half of all lakes and estuaries are too polluted for swimming or fishing, the Environmental Protection Agency said Monday. It projected a gap of more than \$500 billion in unmet water quality needs over 20 years unless spending on treatment facilities rises significantly.

The agency issued two separate reports on water quality that were each based on 2000 data. In one of the reports, a biennial national water quality inventory that formerly was issued as a report to Congress, the agency said runoff from farmland and sewage treatment plants and changes in the natural flow of streams and rivers is fouling the nation's waters.

From 1998 to 2000, the percentage of polluted streams rose from 35 percent, to 39 percent; the percentage of polluted lakes was unchanged at 45 percent; and the percentage of polluted estuaries increased from 44 percent, to 51 percent.

The second report, a so-called "gap analysis" of water infrastructure needs, says that an increase in real spending on the nation's network of treatment plants by 3 percent above the rate of inflation would be required for cities and towns to keep up with pressing needs.

By 2019, systems could be short \$271 billion for wastewater and \$263 billion for drinking water -money that would be badly need to replace aging pipes, maintain existing facilities, and build new ones to meet rising demand, the agency said. With the 3 percent spending increases, the gaps could be held to \$45 billion for drinking water and \$31 billion for wastewater, it said.

G. Tracy Mehan III, EPA's assistant administrator for water programs, blamed deferred maintenance, inadequate capital replacement, and a generally aging infrastructure. But he said funding gaps need not be inevitable. "The overall picture is that probably compared to any country in the world, we've had tremendous success in the past several decades, especially given the rip-roaring growth of the economy and the substantial growth in the population," Mehan said in an interview. "But there's no doubt we face new challenges and more complex problems."

Environmentalists said the reports paint a darker picture than that. "We're not making progress in addressing the remaining sources of water pollution," said Nancy Stoner, director of Natural Resources Defense Council's clean water project.

Owners of water and waste treatment plants immediately suggested that the federal government should pick up the added costs rather than cover them through higher local water and sewer rates. "It bolsters the need for Congress to act quickly on this," said Adam Krantz, a spokesman for the Water Infrastructure Network, a trade group for local elected officials and drinking water and wastewater administrators. "Without immediate action, we're

looking at a massive environmental and public health problem."

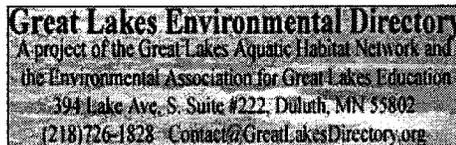
EPA's report made no recommendation on who should pick up the tab.

Krantz said, however, that it probably would add to pressure for more federal funding "now that you have the EPA under a Bush administration, which doesn't want to spend money, coming out and posing a very startling high number."

Bush administration officials have said that they opposed a bipartisan House plan to make billions more available to help states with wastewater projects, because defense spending must take priority.

Congress has funded such projects at \$1.35 billion annually for the past five years, but President Bush sought \$1.21 billion in his budget for the fiscal year starting Tuesday. Instead, senate appropriators added \$100 million, bringing the potential total to \$1.45 billion. For drinking water, senators proposed \$875 million, which is \$25 million more than both what Bush wanted in his budget and what was approved last year.

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News Release

U.S. Department of the Interior
U.S. Geological Survey

Release
March 13, 2002

Contact
Herb Buxton
Butch Kinerney

Address
412 USGS National Center
Reston, VA 20192

Phone
609-771-3944
703-648-4732

Fax

What's in that Water?

USGS Releases First Nationwide Look At Pharmaceuticals, Hormones And Other Organic Contaminants In U.S. Streams

Report available at: <http://toxics.usgs.gov/regional/emc.html>

The U.S. Geological Survey (USGS), today, unveiled the first-ever study of pharmaceuticals, hormones and other organic waste water-related chemicals in streams across the nation. And while the findings are significant in their own right, the work points to the need for more research in the future.

Published today in the journal *Environmental Science & Technology*, the study shows that pharmaceuticals, hormones, and other organic wastewater-related chemicals have been detected at very low concentrations in streams across the Nation. Many of the chemicals examined (81 of 95) do not have drinking-water standards or health advisories. Measured concentrations of compounds that do have standards or criteria rarely exceeded any of them.

Limited information is available on the potential health effects to human and aquatic ecosystems from low-level, long-term exposure or exposure to combinations of these chemicals. These new data can guide future research in these areas.

"Little is known about the environmental occurrence of many chemicals we use to maintain and improve the quality of our daily lives," said Dr. Robert Hirsch, USGS Associate Director for Water. "This study begins a process of exploring the occurrence of these chemicals in our nation's streams. The new techniques for measuring these chemicals will be very helpful for the many scientists who study contaminant movement, impacts on ecosystems, and human health effects."

The USGS study found that chemicals used in households, agriculture, and industry can enter the environment through a variety of wastewater sources, according to Dana Kolpin, a USGS research hydrologist and head of this national study. Those compounds include human and veterinary drugs (including antibiotics), natural and synthetic hormones, detergents, plasticizers, insecticides and fire retardants.

The most frequently detected compounds included: coprostanol (fecal steroid) cholesterol (plant and animal steroid) N-N-diethyltoluamide (insect repellent) caffeine (stimulant) triclosan (antimicrobial

TRANSMITTAL LETTER

City of Missoula

Public Works Administration/Engineering Division

435 Ryman Street, Missoula, Montana 59802-4297

(406) 523-4620

TO Pat Roe
Project Manager
Brown and Caldwell

Date	<u>3/7/97</u>	Proj No	<u>94-004</u>
Attention			
RE:			

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- | | | |
|---|---------------------------------------|---|
| <input checked="" type="checkbox"/> Agreement | <input type="checkbox"/> Plans | <input type="checkbox"/> Specifications |
| <input type="checkbox"/> Copy of Letter | <input type="checkbox"/> Change Order | <input type="checkbox"/> _____ |

Copies	Date	No.	Description
<u>1 original</u>	<u>3/7/97</u>		<u>Amendment #1 to WLOF Plan</u>
			<u>Update - executed</u>

THESE ARE TRANSMITTED

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> As Requested | <input type="checkbox"/> Approved As Submitted | <input type="checkbox"/> _____ |
| <input type="checkbox"/> For Approval | <input type="checkbox"/> Approval As Noted | <input type="checkbox"/> For Your Information |
| <input type="checkbox"/> For Your Action | <input type="checkbox"/> Returned For Corrections | <input type="checkbox"/> For Review and Comment |

REMARKS _____

SIGNED Brenda Anderson
Admin. Secretary

COPY TO Project File
94-004
Exhibit 7

44-00-

AMENDMENT NO. 1
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN CITY OF MISSOULA AND BROWN AND CALDWELL FOR
WASTEWATER FACILITIES PLAN UPDATE

PREAMBLE

THIS AMENDMENT NO. 1 to the Agreement for Consulting Services dated February 13, 1995, between the City of Missoula, hereinafter referred to as "Client," and BROWN AND CALDWELL, INC., a California corporation authorized to provide consulting engineering services in the State of Montana, hereafter referred to as "Consultant," is made this 24 day of February, 1997.

RECITALS

WHEREAS, the City of Missoula has retained Consultant to update the 1984 Wastewater Facilities Plan; and

WHEREAS, the City of Missoula discharges treated wastewater effluent to the Clark Fork River; and

WHEREAS, the Tri-State Implementation Committee, in conjunction with the Montana Water Quality Division Program, has developed a Voluntary Nutrient Reduction Program to protect the beneficial uses of the Clark Fork River; and

WHEREAS, the proposed Voluntary Nutrient Reduction Program consists of a total maximum daily loading (TMDL) of wastewater effluent nutrients; and

WHEREAS, the proposed Voluntary Nutrient Reduction Program is inconsistent with growth management objectives of the City of Missoula and Missoula County; and

WHEREAS, the Client wishes to obtain said services of said Consultant to evaluate the proposed Voluntary Nutrient Reduction Program and propose alternative approaches; and

WHEREAS, Consultant has available and offers to provide personnel and facilities necessary to accomplish the work within the required time;

NOW, THEREFORE, the Client and Consultant agree as follows:

I. SCOPE OF CONSULTING SERVICES

The scope of Services in the Agreement is amended to provide to services defined in Exhibit B.

Agreement
Page 1
February 6, 1997

II. SCHEDULE

Consultant is authorized to proceed with the modified Scope of Services effective on the date of this Amendment. The scope shall be completed in accordance with the schedule defined in Exhibit D.

III. COMPENSATION

Compensation for the services provided under Article I of this Amendment shall be calculated on the same basis as in the Agreement. The labor hours and cost estimates for completing the services defined in this Amendment are shown in Exhibit C. The estimated compensation for the services performed under this Amendment is \$95,151.90 which increases the total estimated compensation under the Agreement to \$544,739.79.

All other terms and conditions of the agreement and any amendments thereto remain unchanged.

BROWN AND CALDWELL

CITY OF MISSOULA

David L. Parry
By
David L. Parry
Vice President

Mike Kados
By

Meyer
Title

2-6-97
Date

3/6/97
Date

Martha A. Gobbin
Attest
City Clerk

Approved as to form:

Jim Nugent
City Attorney

**CITY OF MISSOULA
WASTEWATER FACILITIES PLAN UPDATE**

**EXHIBIT A
DESCRIPTION OF PROJECT**

The Clark Fork River and its tributaries are key environmental resources. However, in recent years the river water quality has deteriorated. Excessive algae growth caused by nutrients, primarily nitrogen and phosphorus, have caused the State Water Quality Division to classify the river as water quality impaired. The Clark Fork-Pend Oreille Basin Water Quality Study identified the Missoula municipal wastewater treatment plant as the single largest point source discharge of nutrients to the river system. The basin water quality report recommended that seasonal land application of wastewater and other improvements be implemented at the Missoula Wastewater Treatment Plant. Other major nutrient contributors identified include Butte, Deer Lodge, Stone Container Corporation, and the Bitterroot River discharge. A significant nitrogen contributor to the lower reaches of the Bitterroot River are septic tanks in the unincorporated Target Range area.

Total Maximum Daily Loading

To protect the river, the Tri-State Implementation Council of the Clark Fork Coalition, in conjunction with the Montana Water Quality Division, developed a preliminary total maximum daily loading (TMDL) for nutrients in the Clark Fork. With this approach, the river's assimilative capacity is allocated among the point source discharges. Although non-point sources contribute to water quality deterioration, regulatory agencies have historically focused on point sources controls first, often because the technology is better understood than non-point source controls. To meet the TMDL, preliminary recommendations from the State are that Missoula's discharge of phosphorus and nitrogen be reduced by greater than 90 percent during the seasonal period from late June to late September. This TMDL will be implemented through modification of the City's National Pollutant Discharge Elimination System Permit.

Surface Water Protection

In recent months, the focus of the wastewater facilities planning effort has been review and commentary on the proposed Voluntary Nutrient Reduction Program (VNRP). This component of the planning effort has gradually become the key focal point. The proposed VNRP considers only the four largest point source dischargers, and not the smaller point sources and nonpoint contributions.

The proposed program appears to be inconsistent with the community's growth management planning. A number of potential barriers exist to concise analysis and response to the VNRP Committee on the City's position.

- First, the VNRP was established to focus only on the largest point source dischargers, limiting the overall view of watershed management. For example, nonpoint source loadings have not yet been quantified and the Bitterroot River, including point sources, has been set aside.
- Second, the Missoula Wastewater Treatment Plant will not achieve the target nitrogen phosphorus discharge loadings even with a significant upgrade to advanced treatment with biological nutrient removal and a large capital investment.

Exhibit A
Page 1

February 6, 1997