

1840 East River Road  
Suite 207  
Tucson, Arizona 85718-5892  
(520) 529-1798  
FAX (520) 529-2927

RECEIVED  
8-30-96

ORIGINAL

August 29, 1996

Christina Waddell  
Navigable Stream Adjudication Commission  
1700 West Washington, Room 404  
Phoenix, AZ 85007

Dear Ms. Waddell:

Enclosed are packages of evidence regarding navigability of the Salt and Gila Rivers. This is not intended to be an exhaustive submittal. It merely supplements material that has been or will be provided by the State Land Department. We further reserve the right to submit additional evidence in the future.

One set of enclosed materials (Labeled "Material Relevant to both Salt and Gila Rivers") includes excerpts from our Court of Appeals briefs in Arizona Center for Law v. Hassell, 1 CA-CV 89-134 (Az. App.). The information in these briefs relates to both the Salt and the Gila, as well as other watercourses. Exhibits cited in the briefs are available in the official court files on the case, and can also be reviewed at our office in Tucson. The following abbreviations are used in the briefs for references to exhibits: 'A' references are to page numbers in the Appendix to Appellants' Opening Brief in the Court of Appeals; 'SA' references are to page numbers in the Appendix to Appellants' Reply Brief in the Court of Appeals; 'PSJ' references are to exhibit numbers in Plaintiffs' Motion for Partial Summary Judgment in the Maricopa County Superior Court, case No. CV 87-20506; 'I' references are to item numbers in the Superior Court Document Index dated February 20, 1989; 'IA' references are to item numbers in the Amended Superior Court Document Index dated March 20, 1989.

In addition, on January 13, 1994, we submitted to the Commission an extensive package of exhibits relevant to the Salt River. Admin. Docket No. 94-1, Exhibits Submitted by Arizona Center for Law in the Public Interest. We ask that these exhibits be part of the evidence considered in all current and upcoming deliberations by the Commission on the Salt River. We also ask that the Commission consider the CH2M Hill report previously

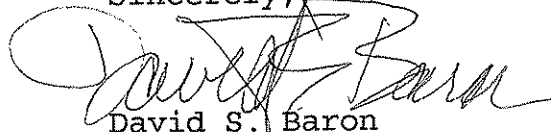
Maricopa County, Lower Salt River  
03-005-NAV

4/7/03

submitted by the State Land Department: "Arizona Stream  
Navigability Study for the Salt River: Granite Reef Dam to Gila  
River Confluence" (Oct. 1993).

If you have any questions, please do not hesitate to call me.

Sincerely,

A handwritten signature in cursive script, appearing to read "David S. Baron". The signature is written in dark ink and is positioned above the printed name.

David S. Baron  
Assistant Director



ORIGINAL

RECEIVED  
8-30-96

Salt River

Exhibits submitted by Arizona Center for Law in the Public Interest

August 29, 1996

MARCH 5, 1992 THE PHOENIX GAZETTE

## sure ndfill ued /suit seek ri-City site

### TITE

unting to close the  
near Mesa as soon as

izona, the group that  
the proposed ENSCO  
ncinerator, intends to  
in four weeks in U.S.  
oenix.

wed under the federal  
tion and Recovery Act,  
landfill be closed and  
on as possible by its  
River Pima-Maricopa

e state Capitol, legisla-  
debate over two House  
osing the landfill by  
by its primary custom-  
Mesa, Scottsdale and

ne lawsuit and House  
n is needed to close the  
addles the Salt River  
ened by runoff being  
Reef Dam.

me public health con-  
eration of this site for  
20 years the govern-  
e promised continually  
ation and resolve these  
Lemmon, an environ-  
and lobbyist for the  
Health Association, a  
LANDFILL, Page A2

## ayer's awarded 0 by jury

### TITE

a Shadow Mountain  
l player who collapsed  
st day of practice has  
ward from a Maricopa  
urt jury.

Unified School District  
to  
ver-  
ced



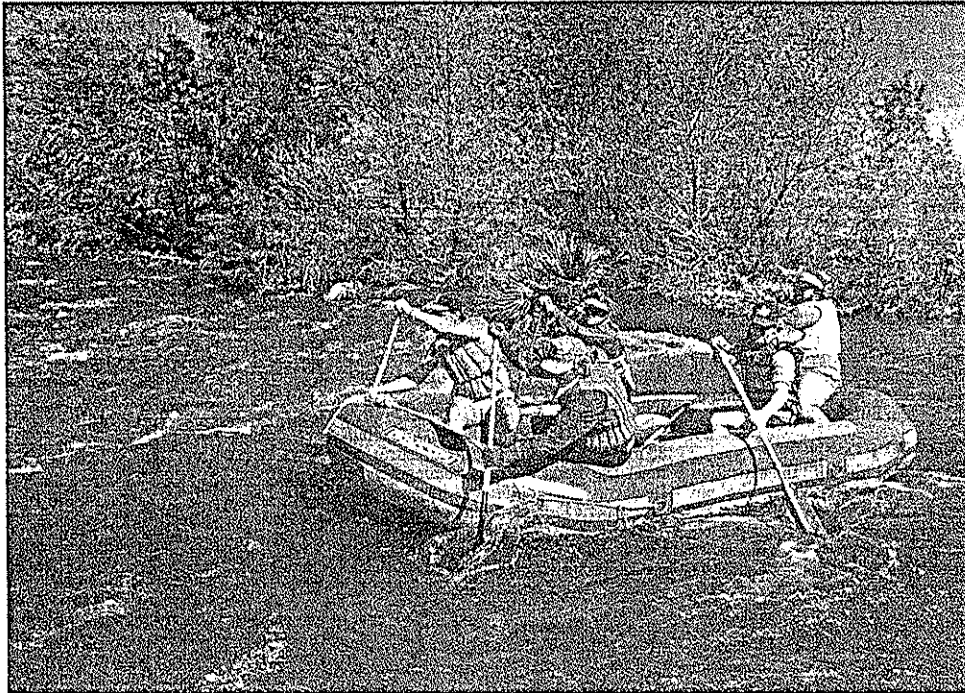
REED

the  
ent  
and  
was  
beci-  
for  
had  
ter to practice on

vis, Reed's mother, said  
the judgment to set up  
for coaches and train-

rd "doesn't really ease  
had the message is out

"This may sound crazy, but can we raft  
the Salt River through Phoenix?"

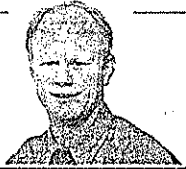


Russell Gates / THE PHOENIX GAZETTE

A paddle-raft crew led by Clay Baldwin (far right) Street in Phoenix. The rafters put in at 56th Street  
rides through a riffle on the Salt River near 16th and floated the river to Seventh Avenue.

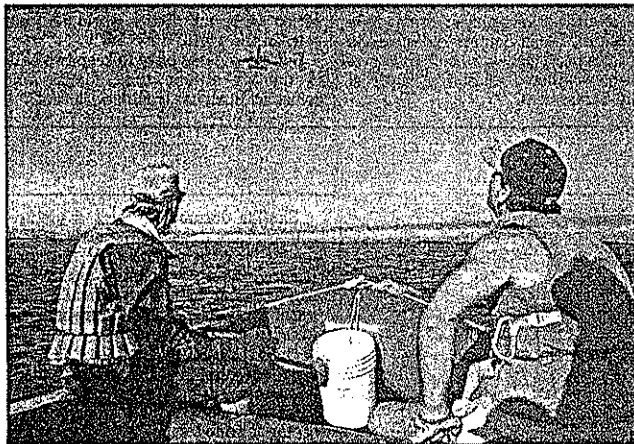
DENNIS  
WAGNER

THE  
PHOENIX  
GAZETTE



## River Phoenix

### I survived Buick Bumper Rapid on urban brown-water voyage



THE PHOENIX GAZETTE

Billy Sims (left) and Dale Stewart watch a plane pass overhead near Sky Harbor International Airport. The Salt River water was about 2 feet deep and flowing at about 3 mph.

Y ears ago I went to a party and met a rude man who, like myself, argued about virtually anything.

Conversation turned somehow to the Salt River, and I allowed how it would be fun to ride a raft through the middle of Phoenix.

The rude man declared that would be impossible because the Lower Salt has no water. I insisted that the river was once a navigable waterway and could still be sailed in wet years.

This elicited such a spate of condescending laughter that I left, remarking to my wife that I never wanted to encounter that arrogant fellow again. But I have changed my mind. Once more I'd like to meet that jerk and say, "Hey, pinhead, I sailed the Salt through Tempe and Phoenix."

Yes, thanks to a moist winter, SRP has been dumping water through Granite Reef Dam, making conditions perfect for an urban voyage.

See RIVER, Page A8

## 16-year-old suspect in temple slayings to be tried

By J.W. Brown  
THE PHOENIX GAZETTE

"They rounded these people up... and they massacred them in cold blood," said Deputy County Attorney K.C. Scull in

used to shoot down nine people who are either kneeling or lying down," Scull said, adding the temple residents were non-

Court is Johnat preliminary her Donald Rainey



Tempo

A  
Col

Being 9 year  
stop Tristan  
concerto. Ah

## Tsong debat on re

Kerrey's b  
await form

By Pat Flannery  
THE PHOENIX G

Thaleia Tso  
twin sister of  
contender Pau  
Arizona on W.  
Sen. Bob Kerr  
awaited forma  
dismantle itsel  
cratic caucus.

Kerrey, who  
South Dakota

Kerrey nev  
A look at B

Wednesday to  
the race, thoug  
of his intentio  
today.

Janet Napol  
and chairwoma  
Kerrey's Ariz  
effort, said the  
braska sena  
canceled his it  
ary and met  
Wednesday  
Senate suppor  
in Washing  
D.C.

Regardless o  
decision, Kerr  
urday's Arizon  
since they have  
"Any votes  
counted" if  
Napolitano saic  
Schlesinger,  
Arizona appear  
Phoenix news

# RIVER

The legalities were in question, however, so I called SRP spokeswoman Terri Morris. She had no idea who owns the river, but suggested I contact Bill Silvey, a fisheries management guy at the Game and Fish Department.

"I don't know who could answer that," he said. "It's such an unusual event when water goes through there."

Silvey directed me to Howard Kopp, legal counsel at the Department of Water Resources, who declared the law on Arizona rivers is a bit murky. The water belongs to the people, but the flood channel belongs to the federal government unless the river was navigable in 1912, in which case it belongs to the state.

"What about rafting it?" I insisted.

Kopp said something like, "Har-rumph," which I interpreted to mean "Yeah, go ahead. Sounds like a great idea."

So I called Clay Baldwin at Salt River Raft Trips and said, "This may sound crazy, but can we raft the Salt River through Phoenix?"

Baldwin, it turns out, is a gung-ho dude undeterred by gravel pits, garbage dumps or unidentified slime. He even brought along pals from the rafting outfit.

## Not my first trip

I should interject that this wasn't my first trip down the Lower Salt. Five years ago, while Valley voters were mulling the \$3 billion Rio Salado Project, I hiked 20 miles of riverbed from Mesa to west Phoenix. The Pima Indians kicked me off their reservation. A colony of illegal aliens shared warm beer with me. And I caught a mutant bluegill in a pea-green pool.

I was hoping to raft the same, idyllic stretch. But by last week the flow had dropped to a laconic 1,900 cubic feet per second. Expecting slow water, we shortened the trip and cast off from 56th Street in Tempe, planning to haul out at Seventh Avenue in Phoenix.

It was 8:35 a.m. The sky was blue except over Phoenix, where it was dirty yellow. The water, meanwhile, was brown and 50 degrees. It rolled along, averaging about 3 mph and 2 feet deep.

Baldwin, our skipper, sat in the rear of a 14½-foot raft barking navigational commands and cracking jokes while using an oar to steer or maintain discipline.

"Forward paddle," he'd call. "Stop. Left paddle. Rear paddle. No splashing."

Not that paddling was all that important. Tempe has bulldozed a flat, wide channel through river

**"There's a jagged piece of metal . . . We'll call that Buick Bumper Rapid."**

rock. It is not what you'd call a pristine riparian area, but at least the water doesn't meander.

Our professional crew, accustomed to scenery and whitewater, grew bored and began reminiscing about stupid things people say on raft trips. Their favorites: "Do the rocks go all the way to the bottom?" And, "Will we come out where we begin?"

Near the Hohokam Expressway, there was general agreement that a Jolly Roger flag was sadly lacking. We floated past several submerged tires. Jet bellies soared overhead from Sky Harbor. A couple of mallards took wing.

## Whitewater ahead!

Finally, someone observed a ripple ahead. Baldwin soberly judged it to be a Level 1 rapid and, as we scraped bottom on a shoal, began singing: "If not for the courage of the fearless crew, the Minnow would be lost."

Near the Maricopa Freeway overpass I pulled out my fishing rod and began casting a spinner. There weren't any fish, but I snagged a rock and the lure popped loose, creating a crew hazard and a welcome stir of adrenaline.

At the 24th Street bridge we encountered rough water — Level 1.5 at least. "Uh-oh, a sleeper," Baldwin said, using rafter jargon to describe a treacherously hidden object. Then, as our vessel began spinning in a whirlpool, he cried out, "Forward paddle. We got the back-eddy blues."

The excitement was such that Baldwin became giddy. "Cool, man. This is marketable. I know it is."

Someone decided to name the chute "24th Street Rapid," starting a trend so that, with one exception, all rapids thereafter were dubbed for the nearest bridge.

The exception was at a blind bend near 16th Street. "There's probably a jagged piece of metal around that corner," Baldwin joked. Sure enough, a twisted automobile bumper protruded from the ripples. "We'll call that Buick Bumper Rapid," he decided.

Next we encountered a gravel mining operation. A trestle over

the river carried rocks on a conveyor belt from quarry to crusher. A man waved, the first human we'd seen in a city of 1 million.

## Scenery? Forget It

I haven't mentioned scenery to this point because there wasn't any. Just rocks, water and trash. But at Seventh Street we entered The Swamp. Red-wing blackbirds scattered. Bushes protruded from the water, each decorated with paper and plastic trash like hobo Christmas trees.

We also observed a curious liquid flowing into the river from a nearby industrial complex. Baldwin proved his leadership mettle once more, exclaiming: "Ooh, I wonder what's flowing in here. Uh, don't wanna know. Wouldn't be prudent."

Far ahead, a man appeared along the bank, then vanished like a phantom. We began noticing cardboard shacks and tents. There was a sensation of being watched. And I requested to go ashore as we neared the the domicile of Sergio Escarsega, a 36-year-old homeless man.

Sergio seemed rather confused by the sudden appearance of a man in swim trunks and neoprene booties.

"Sabes Ingles?" I inquired. "What? Oh, yeah. Sure," he said.

Sergio's home is a cave along the bank. The walls are laced with old tires and other garbage — remnants of an old dump. Bedding lay on the dirt beside a bucket of food.

Sergio said he came to the river a month ago from a halfway house. "Weed, crack and alcohol," he said. "It'll really screw you up. It almost took my life away."

"I got my Bible and I got the radio," he added, gesturing to both. "I pray a lot and listen to music. Classic rock."

Sergio said high water wiped out a lot of huts. Only a few men remain from the homeless village. "Most of the guys know each other," he added. "We watch each other's backs."

"Do you drink from the river?" Sergio's eyes flashed at the insult. "Are you crazy? No way, Jose."

The voyage resumed through a marshy maze beneath Central Avenue and past more quarries. A motorist crossing the Seventh Avenue bridge honked his appreciation.

We survived the Seventh Avenue Rapid. Then, under the stern watch of an industrial security guard, we headed for shore — and civilization.

From A1

# Viral fever hi

Software antidotes fly off store shelves

By Bart Ziegler  
The Associated Press

NEW YORK — Computer owners snapped up virus-killing software as the Michelangelo virus designed by pranksters to destroy data neared its Friday trigger date.

"We are utterly, completely, totally, 100 percent sold out," Lee Rock, an employee of an Egghead Software outlet in Boston, said Wednesday. "The media whipped people up into a frenzy and they

are  
cre  
dat  
ers  
ina  
fro  
or  
?  
ma  
con  
to  
birt  
tha  
dat  
E  
are  
is a

**BACK B**  
**DEMAN**  
THU

**MAKE U**  
**EVANS** NO F  
REFL  
**F U R S & O N C**  
**LEATHERS** THU

EVERY FUR MUST BE SOLD REGARDLESS OF PI  
SACRIFICE OUR ENTIRE FUR INVENTORY TO MAJ  
A NEW MERCHANDISING CONCEPT. JACKET  
FULL LENGTH COATS, HATS AND BOUTIQUES  
LYNX, CHINCHILLA, BEAVER AND MANY MOR



ALL FURS MARKED AT ORIGINAL PRICES—LEATHER  
With only a small deposit, layaway now with no interest c  
Our furs are labeled to show country of origin.

**BILTMORE FASHION PARK**

**The Strappier,  
The Better**

When it comes to Spring footwear, straps are the main attraction. And Naturalizer is right in

**If Yc**



## Admirals of the Salt

Jan 89 Az Hwys

and despite its size, the town has its own post office. The restaurant boasts the hottest chili and coldest beer in the West.

Although Tortilla Flat looks deliberately delapidated, it's almost always thronged with tourists on weekends in good weather. Maybe that's because it's only a few miles from the beginning of the fabled dirt road and the last of the Apache Trail's pavement.

Where the pavement ends, so does the bumper-to-bumper crowd. From here to Roosevelt Dam—past Fish Creek Canyon and past Apache Lake (smaller than Roosevelt, larger than Canyon, a full-service marina, campgrounds, and more water sports)—you may be treated to the sight of a desert bighorn sheep or two. The animals were reintroduced in 1984. Bald eagles were sighted near Apache Lake in 1985, and bird-watchers hope they may take up permanent residence.

By trail's end at Roosevelt Lake, you'll have a better appreciation both of the hardships of those who preceded you eight decades ago and the natural wonder that was their reward.

At Roosevelt Lake—23 miles long, the largest of the chain of lakes—the pavement begins again, and the road continues on to join U.S. 60. Even if you decide to retrace your route and see the Apache Trail from the other direction (remembering that going west those plunging cliffs are on your side of the road), you should pause to pay a call at Tonto National Monument, just beyond the dam. Here you can visit an ancient Salado Indian cliff dwelling, poking once more into the past.

In the 78 years since Roosevelt Dam was completed, there have been various lobbying efforts to have the Apache Trail paved over its entire length. None has borne fruit, and as of the present, there are no plans to change things. If you drive carefully and take your time, the gravel section really isn't unduly rough, and you'll have to admit, it *does* thin down the traffic.

More than that, it makes you appreciate what you've come to see. "Up here," one old-timer puts it, "you have to *work* to enjoy the fun."

In the long run, maybe that's for the best. ■

(LEFT) Views of centuries-old saguaros and the sapphire waters of Roosevelt Lake reward hikers on the trail to Tonto National Monument.

Joseph E. Brown is a free-lance writer living in Coronado, California.

Free-lance photographer Jerry Sieve is working on a book about his home state of Ohio.

In accounts of Arizona river exploration, their names will never be ranked with Powell's, and few histories of the Apache Trail recall their adventure. Yet a pioneering four-day canoe trip down the Salt River by two teenage Arizonans nearly 70 years ago remains a fascinating if little-known footnote to Apache Trail lore.

Herb Ensign was 18 at the time. His boyhood chum, Don Scott, was a year older. Confirmed Tom Sawyer types, they'd grown up together, attended Monroe School, and vacationed at Camp Creek campground. Later, they served in the Army, then undertook unrelated engineering careers.

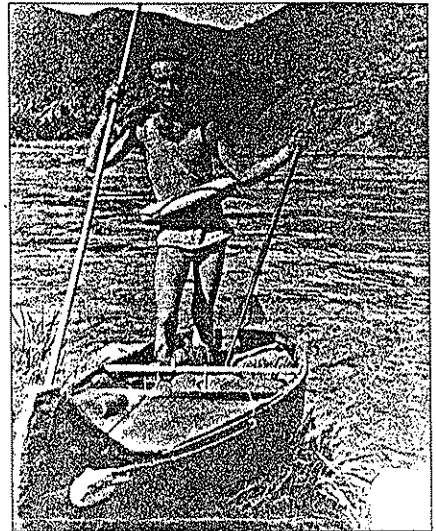
But all their other adventures paled in comparison to the one they shared that blistering summer of 1919. Aboard a 10-foot, 60-pound oak-and-spruce canoe they'd built themselves, they hoped to navigate the Salt River from Theodore Roosevelt Dam to Granite Reef Diversion Dam: from there, they'd continue to the outskirts of Phoenix via the Arizona Canal, all part of the Salt River Project.

According to newspaper accounts of the time, no one had thus mastered the Salt before; at least, no one had and survived. Roosevelt Dam had been dedicated only eight years earlier, in 1911. Canyon, Apache, and Saguaro lakes and their dams did not yet exist, and the Salt was still a wild, twisting, sometimes tumultuous waterway, snaking in one place between 2,000-foot-high canyon walls where an astonished Herb Ensign was later to recall, "You could see the stars at 4 o'clock in the afternoon."

After testing the boat on Roosevelt Lake, Ensign and Scott launched their craft about a hundred yards below the dam on June 12. Even for summer the river was running high: in the wake of a farm labor strike just ended, water badly needed for irrigation in the Salt River Valley was working the dam's outlets overtime.

Of that first day, Ensign noted in a penciled log: "Two accidents. Things are very wet." It was a prophetic observation. A little farther on, the pair encountered rapids. Scott managed to hang on when white water flipped the canoe, but Ensign, catapulted against a bank, was knocked unconscious. Fortunately, both wore life preservers, and Ensign's injuries were minor.

"We considered turning back at that point," Ensign remembered years



In 1919, Herb Ensign stood ready to challenge the wild Salt River in a homemade canoe.

later. "But we couldn't: once we started, there was no way out but downriver."

Ensign's log, faded after almost seven decades, fills out the remaining three days. After righting the craft, he and Scott ran into more rapids. Camping on the shore each night, they cooked over driftwood fires the fish they had caught. At one point they hiked three miles up Fish Creek in search of Indian caves. They saw a few beavers, and more than enough wild steers to satisfy their curiosity. ("When they attacked us," Ensign remembered, "we had to beat them off with our paddles.")

From Fish Creek to Mormon Flat took only 3½ hours. On Sunday, June 15, exhausted but happy, they portaged the canoe around Granite Reef Dam and floated the remaining 27 miles on the Arizona Canal to its junction with Center Street, today's Central Avenue, north of Phoenix.

In the spirit of those small-town days, the *Arizona Gazette* reported that the exploit "has thus placed this city on the water map in a manner that offers many future possibilities." Reporting on their trip a few days later before the Phoenix Rotary Club, Ensign and Scott, perhaps a tad embarrassed by that assessment, admitted that it *had* been a lot of fun.

Ensign retired years later in Sun City, where he died in October, 1985. Scott retired in San Diego, where he lives with his wife, Annette, aboard a powerboat. —J.E.B.



ENVIRONMENT

Who Owns The Riverbeds?

# Legislators & Environmentalists Face Off Again

by Susan Fitzgerald

Feelings run as high as floodwaters when people talk about who owns—or should own—Arizona's riverbeds. After 82 years of statehood, the matter is still in question, and with it the status of the state's damaged river

ecosystems.

Whether Arizona's riverbeds get protection as state land depends on who owns them, and the answer to that lies in whether the rivers were navigable at statehood. But no one can agree on what constitutes navigability.

There isn't any one answer; each

branch of government seems to develop a definition to suit its purpose.

Even Arizona lawmakers can't agree—in 1992 they passed a law that said a river must have been navigable in its ordinary condition at statehood in 1912 for the state to claim the riverbed. That means even though there were dams and irrigation diversions from some rivers in 1912, navigability must be assessed on the condition of the river as if those man-made structures weren't there.

Though the 1992 law passed the Legislature easily, an influential lawmaker decided last year that the definition was too broad. House Speaker Mark Killian introduced a bill this year to narrow the definition to protect private property holders. The bill easily passed the Legislature and awaits the governor's signature.

Mr. Killian has argued that the state's rivers never were navigable in any commonly understood sense. "Nobody's ever seen a steamboat going up the Salt," he has said often. His bill, H2589, will protect residents

against the "state land grab" that he said would have resulted from the 1992 law.

One major difference between the 1992 law and H2589 is the narrowing of the navigability definition to require consideration of the effect of the dams and irrigation diversion on rivers' navigability, and to exclude any evidence of fishing, ferrying and small boating.

Raising the hurdle for the navigability determination, and adding provisions like suing the federal government if the state has to claim land the U.S. ceded in the last century, makes remote the likelihood that the state ever will claim riverbed land for the public trust, the bill's opponents say.

## Case History

Mr. Killian blames environmentalists for putting the state in the situation of possibly seizing privately owned riverbed land.

But actually, the state can blame itself. The attorney general's office

continued on next page

### FISH STORIES

*Arizona Gazette*, March 7, 1882: "A lucky disciple of Izaak Walton succeeded in hauling a five pound fish from the Salt River this afternoon. It was a Colorado River salmon."

*Phoenix Herald*, June 20, 1888: It is said that the river below the Arizona Canal dam is filled with dead fish. This is, without doubt, the result of there being no fish way in the dam. In all states there is a law requiring builders of dams to construct fish ways. There must be a United States law covering the case in the Territories, as it is not likely the U.S. Fish Commission would distribute [stock?]

fish where the circumstances were unfavorable for their existence, but if there is no such law in force, it will be incumbent on our next Territorial Legislature to pass one."

*Arizona Gazette*, June 13, 1908: Many little folks are present today with their elders ... having a royal time catching fish below the (Granite Reef Diversion) dam. The cutting off of the water has resulted in the death of thousands of fish for several miles down the river. The pool immediately below the dam is filled with them and the youngsters have pulled out hundreds."

ENVIRONMENT

# Riverbeds

continued from preceding page

tried in 1984 to halt a sand and gravel operation in the Verde River, using as its premise the English common law principle that navigable waterways belong to the government to be held for the public good.

Arizona had the right to claim its rivers for the public at statehood, but it claimed only the Colorado River, ignoring the hundreds of river miles in the Salt-Gila and Little Colorado systems. This action cleared the way for private interests to use the rivers solely for their benefit, whether to divert 100 per cent of the water for irrigation, dam it for hydroelectricity or mine the subsequently dry beds for rock products.

The attorney general's action on the Verde River opened a Pandora's Box, leading to the possibility that the state might come in at any time and assert its sovereign rights to riverbed land. The Legislature attempted to forestall possible disputes by passing a law in 1987 to allow the state to waive its riverbed interests for \$25 an acre.

Just months after that law went into effect, the Center for Law in the Public Interest sued the state on behalf of individuals who are members of environmentalist groups, Mr. Killian, has said. The Center challenged the constitutionality of the law, calling it a "giveaway" of possible public trust lands.

The Court of Appeals ruled in 1991 that the law was unconstitutional because it did not provide for an evaluation of the validity and value of the state's public trust interest on the individual rivers. It was in response to that decision that the Legislature passed the 1992 law, which established the Arizona Navigable Streams Adjudication Commission.

The commission's announcement last fall that it would conduct hearings on the Salt River's navigability got private landowners in an uproar over the possibility of having their land seized. That's when Mr. Killian decided to introduce H2589.

## The Bill's Impact

Mr. Killian's bill puts the Legislature, not the commission, in charge of determining navigability, after receiving the commission's recommendation. That change guts the commission's

efforts, says David Baron, assistant director of the Arizona Center for Law in the Public Interest.

"This will have a severe impact on riparian resources," Mr. Baron says, calling H2589 "nothing more than a back door attempt to give the rivers to the sand and gravel companies. It is our position that this is a breach of the public trust."

"The bill requires the commission to ignore all kinds of evidence of navigability—it's absurd," Mr. Baron says. "It sets up numerous roadblocks to

determining navigability." And while the bill calls for the state to reimburse all taxes ever paid on property it might claim, Mr. Baron points out that it does not require repayment to the state of any profit from using the land.

"The whole process is designed to make it very unattractive to make a claim," Mr. Baron says.

Mr. Killian says he wants to avoid the state taking land from people who believe they own it. He speaks passionately about the generations of people who have farmed the land. That

pastoral image is a small part of the land use picture, however. "Very little of it [the riverbed] is actually being farmed, but some of it may be owned by farmers," says Bob Yount, the state Land Department's director of natural resources division.

No information is available on the number of land owners who would be affected by a state claim to riverbeds. Such information is painstaking and expensive to come by, says Mr. Yount, and the law doesn't require it unless navigability is determined. Then, the

continued on page 12



## WE'RE PROUD TO INTRODUCE OUR NEW ENVIRONMENTAL RECLAMATION EMPLOYEES.

(the only problem is getting them back into the barn at night)

Cows. The fact is, they are part of the new technology being used by Magma to improve the environment. You see, we put the cows' food atop old piles of mine tailings. On the way up to the food, they churn up the tailings, adding vital air and natural fertilizer. The same thing happens on the way down, too. The result is the creation of soil that hosts fast-growing, erosion-reducing grass and other plants. Which in turn helps feed the cows. While this may not seem like whiz-bang technology, it does show how innovative thinking can dramatically improve the world around us. And at Magma, that's an important part of doing business.

**MAGMA**

Magma Copper Company  
7400 N. Oracle Rd. Suite 200  
Tucson, Arizona 85704  
Telephone 602.575.5600

ENVIRONMENT

# Riverbeds

continued from page 11

department would conduct a thorough title search of property within the "ordinary high water mark" of the existing riverbed to determine the extent of the state's claim. Mr. Killian's bill would change those boundaries to the "ordinary low water mark."

Some general information has been pieced together from various sources in the case of the Salt River, for which navigability hearings had been scheduled and now are postponed. The land use and ownership information was gathered as part of a report the commission could use to determine navigability.

In the stretch of the Salt from Granite Reef Dam to its confluence with the Gila, about 12,000 acres in the "ordinary high water mark" of the existing riverbed, no owners have been identified yet for about 4,600 acres; about

6,000 acres is in private hands and about 1,000 is in the hands of federal, state or tribal governments (see chart below).

Land use is varied: about 700 acres are in agricultural use; 200 acres are zoned residential, although the land

Owner	Acres
Private	6,012
Unknown	4,610
State	720
Gila River Indian Community	119
Bureau of Land Management	96

Source: CH2M Hill, SWCA Environmental Consultants and Arizona Geological Survey

department says there are very few dwellings in the area; 300 acres are used for sand and gravel mining; and about 2,000 acres are commercial and industrial (see chart page 14).

continued on page 14

## The Way It Was

Research of early newspaper accounts on rivers was performed by Earl Zarbin, former Arizona Republic reporter, for a Salt River navigability study for the Arizona Navigable Streams Adjudication Commission.

H2589 restricts the definition of navigability to exclude from consideration information like that found in these old newspaper items.

*Arizona Weekly Miner*, June 14, 1873: "The [Charles Trumbull] Hayden Party followed the Salt for nearly 200 miles and found nothing to interfere with floating logs down." [A later news item mentions some rapids and narrow canyons that hindered the floating of logs down the river for commercial purposes.]

*Arizona Gazette*, Feb. 17, 1881: "Messrs. Cotton and Bingham will leave tomorrow for Yuma by way of the Salt and Gila rivers. They have constructed for the trip an 18-foot skiff, flat-bottom, which will draw very little water..."

*Arizona Gazette*, Feb. 14, 1883: "The Salt is a navigable stream and should be included in the river and harbor appropriation bill. North Willcox and Dr. G.E. Andrews, U.S.A., of McDowell, landed at Barnum's pier, on the Salt River Valley Canal, at three o'clock yesterday afternoon, direct from McDowell (aside the Verde River), having accomplished the voyage from that point to this port, in a canvass skiff.

The running time proper was about eighteen hours."

*Phoenix Herald*, April 8, 1884: "Mr. A.J. McDonald is building a large ferry boat for the Gila and Salt River Ferry Company to be put on the Salt River below town. It will be of the same dimensions as the one sent to the Gila, viz: 16 by 48 feet. It will be worked on an inch and a quarter steel cable and be a permanent arrangement."

*Phoenix Herald*, Feb. 18, 1895: "Yesterday morning Amos Adams and G. W. Evans arrived in Phoenix having come all the way from Clifton to Sacaton in a boat. They left Clifton on January second and launching their boat which had been especially constructed for the purpose on the San Francisco river, they journeyed down that stream to the Gila which they entered fourteen miles below Clifton. From that point they remained on the Gila until they reached Sacaton, travelling by that stream about three hundred miles. There they ... hauled their boat to Phoenix after laying in provisions, they will leave tomorrow on the Salt River to the Gila, thence to the Colorado and by that stream to the Gulf..." A week later the paper published an update from the boaters at Gila Bend: "In terms of my promise to write I wish to say that we found nothing unusual on our voyage down the Salt and Gila rivers except that ducks were plentiful..."

ENV

# Riverbeds

continued from page 12

## Threatened Rivers

These are the very uses that have caused Arizona's rivers to become "threatened" ecosystems, says Dr. Julie Stroud, an assistant research professor at Arizona State University's Center for Environmental Studies.

"All the water that now supports Phoenix used to support huge forests of cottonwood and willow," but she says the state Game and Fish Department has mapped the remaining riparian areas and found only about 10,000 acres of cottonwood and willow left of what once had been a vital ecosystem.

"The Salt and Gila were large and impressive rivers. They were the dominant feature of the landscape," says Ms. Stroud. (See related box on early accounts of river.) "What we're left with now are the remnants—all the big rivers have been killed." Causes of death, she says, include mismanagement of water resources, overgrazing, overpumping of groundwater, farming in floodplains, and urbanization.

"The wetland community is almost all gone, which has had a major impact on wildlife in the lower elevations ... as the rivers go, so go the wildlife," she says. Arizona's rivers used to support beaver dams, fish from as far away as the Colorado River, and the riparian areas were home to jaguars, bear, mountain lion, turkeys and javalina. She says fish and bird populations are especially hard-hit.

## Law's Impact Questionable

There is no guarantee riparian areas will be preserved or restored even if a river does clear all the roadblocks to a navigability determination, says the Land Department's Mr. Yount.

"I think everybody realizes there are values associated with riparian areas and we protect them where we can," he says. "But there are compromises that have to be made as well" among the various parties interested in the uses of the land.

For example, land along the high-water mark of the Arizona side of the Colorado River is designated as "sovereign" and some of it is used for parking lots and boat ramps, because those uses are deemed to fall within the public trust values of that land. The "sovereign" designation, which would extend

WENT

to other rivers declared navigable, "doesn't mean you can't use this land, you just can't use it to the detriment of public trust values," Mr. Yount says.

If declared navigable, public trust guidelines would be developed for riverbed uses. Under current law, the navigable streams commission is to determine public trust values after public hearings with testimony from interested parties. Under H2589, the Legislature would take on that task.

Mr. Yount says public trust values for a stretch of the Salt River through Phoenix could "theoretically" encompass existing sand and gravel operations because the river is dry there most of the

Land Use	Acres
Unclassified	4,731
Misc. Undeveloped	2,341
Misc. Industrial	1,426
Municipal/County	1,212
Agricultural	673
Misc. Commercial	508
Mineral/Mining	307
Residential	188
Misc. Developed	84
Parks/Recreation/Drainage	57
Retail/Wholesale/Warehouse	30

Source: CH2M Hill, SWCA Environmental Consultants and Arizona Geological Survey

time, while a stretch of the river upstream of the irrigation dams could be precluded from having such operations as inconsistent.

"Until we go through the exercise of determining public trust values, it's pretty hard to know what the guidelines would be," Mr. Yount says, but he says the uses need not be confined to restoring or maintaining a pristine riparian area.

## Suit Threatened

Resolution of the navigability and ownership issue is years away, by anyone's estimate. Mr. Killian's bill was given final approval in the last days of the legislative session and if it is signed into law by Governor Symington, Mr. Baron has said the Center for Law in the Public Interest will take the state to court again.

If the riverbed ownership issue is just another version of the West's battles over water, environmentalists may take a lesson from that history: Water in the West flows in the direction of money. That may forecast the outcome of this battle, as well. ■





# United States Department of the Interior

## NATIONAL PARK SERVICE

### SOUTHWEST REGION

State and Local Affairs  
5000 Marble N.E., Room 211  
Albuquerque, New Mexico 87110

IN REPLY REFER TO:

L74(SWR S)

MAY 11 1982

Dear Sir/Madam:

We are pleased to transmit the Nationwide Rivers Inventory, a listing of the Nation's significant free-flowing streams. The list represents the culmination of a six-year program to inventory the Nation's river resources.

Enclosed is the section of the inventory for the state in your address. The regional offices of the National Park Service have considerable additional information on file for each listed river, and many river segments have been recorded on video tape. Both file data and video tapes are available to the public. If you would like to receive other state listings, or additional information, please contact the nearest regional office for those states.

Sincerely,

James J. Donoghue  
Acting Associate Regional Director  
State and Local Affairs

Enclosures: 2

River Name	Physiographic Section	Other State(s)	County (s)	Congressional Districts	Segment Reach Description	Length (miles)	Outstandingly Remarkable Values							Narrative Description of Values		
							Scenic	Recreation	Geologic	Fish	Wildlife	Historic	Cultural		Other	
Little Colorado River	21e		Coconino	3	Colorado River confluence to Sunrise	115	X		X							River channel varies from steep, multi-colored canyon walls in Lower Colorado River Gorge to tablelands of moderate relief in the scenic Painted Desert region; extreme lower portion flows through world famous Grand Canyon National Park; important habitat for the endangered humpback chub.
Paria River	21c	UT	Coconino (AZ) Kane (UT) Garfield (UT)	3 (AZ) 2 (UT)	Colorado River confluence to source	92	X	X	X			X				Canyon walls 1000' high provide outstanding scenic vistas; excellent hiking opportunities; numerous geologic formations; potential habitat for Virgin River Spinedace, Razorback sucker, Virgin River Chub and the roundfin; large wildlife populations; passes through Paria, Utah ghost town; many pictographs and petroglyphs; portion in BLM primitive area and being considered for wilderness designation.
Salt River	22d		Gila	4	Fort Apache Indian Reservation to confluence of White and Black River	61	X	X	X	X						Pristine river channel; upper portion of Salt River canyon contains extremely varied geologic formations--area often called a mini-Grand Canyon; three federally listed endangered species are present--bald eagle, Mexican duck, Colorado River Squawfish; riparian vegetation supports both high populations and diverse species of wildlife; one of the best whitewater streams in Southwest.