# Verde Watershed Symposium – State of the Watershed in 2001

# **Upper Verde River Headwaters Field Trip**

May 19, 2001

#### Introduction

The Upper Verde River headwaters is region with unique hydrology and geology that has played an important role as the site of the first territorial capital and the subsequent development of Northern Arizona, including the City of Prescott and the Grand Canyon tourism industry. Large artesian springs offer a continuous supply of surface water to both upstream (Chino Valley and Prescott) and downstream (Verde Valley and Phoenix) water users. This perennial water also supports an unusually diverse and rich riparian habitat in the Verde River. Competing water rights and rapid population growth in the Prescott AMA and other nearby parts of Yavapai County has caused concern that increased pumping in Big and Little Chino Valleys could reduce base flow in the Verde River. In this field trip we will explore the cultural history, hydrology, geology, and biology—and consider the effects of past and probable land use changes on the area.

### Purpose

The purpose of this field trip is to visit the major springs that discharge to the uppermost Verde River and to discuss geologic and hydrologic aspects of their origin and occurrence, and how they have changed through historic and geologic time. Resource people who have been involved in this issue will be available to both lead and participate in information dissemination related to this topic.

- 7:45 Load vehicles at Cliff Castle Casino, Camp Verde, depart for Chino Valley
- 8:45 Stop at McDonalds in Chino Valley

Bathroom Stop

Pickup locals who didn't depart from Camp Verde

Distribute field trip handouts

9:15 Del Rio Springs. Coffee, OJ, and refreshments.

Welcome/Introductions

(Abe Springer, 10 min)

Discuss cultural history from prehistoric to this century

(Terry Munderloh, Sharlott Hall Museum, 15 min)

Wildlife and Ecology of Del Rio Springs

(Carl Tomoff, Prescott College, 15 min)

Hydrology of Del Rio Springs

(Laurie Wirt, U.S. Geological Survey 15 min.)

Competing Water Rights at Del Rio Springs

(Jim Holt, Prescott Active Management Area, 15 min)

Future plans for the Del Rio Ranch Development

(Bill Allen, hydrologic consultant, Allen Stephenson and Associates, 15 min)

Discussion or to walk around (15 min)

11:45 Sullivan Lake Dam (Verde River mile 0.0) off old state route 89

Geologic history of Big and Little Chino basins

(Ed DeWitt, U.S. Geological Survey, 15 min)

Hydrology of Upper Verde River headwaters

(Laurie Wirt, U.S. Geological Survey, 10 min)

Overview of USGS-Tucson studies

(Betsy Woodhouse, U.S. Geological Survey, 10 min)

12:30 Park near Old Morgan Ranch on Verde canyon rim

Distribute box lunches

Hike 0.5 mile to confluence of Verde River

and Granite Creek (river mile 2.0)

Lunch with invited speaker to talk about endangered fish and riparian habitat

(Pam Sponholtz, Arizona Game and Fish, 30 min)

Brief tour of Stillman Lake and first perennial flow in the Verde River.

(Laurie Wirt, U.S. Geological Survey, 20 min)

#### 1:30 Hike to major springs

(1.6 mile round-trip on level terrain)

View about a half dozen springs that make up the springs of the Verde Headwaters, the major spring network contributing to base flow in the Verde River

(Laurie Wirt, Betsy Woodhouse, Ed deWitt, and Victoria Langenheim,

USGS; Marnie Greenbie, ADEQ; about 2 hours)

Questions and discussion welcome!

3:45 Scheduled departure from Verde Canyon (hike 0.5 mile back up to the rim)

4:15 Chino Valley dropoff

5:15 Return Cliff Castle Casino, Camp

### **Recommended Gear**

Small daypack or fanny pack

Layered clothing (cool morning, warm afternoon)

Long pants (potential for poison ivy and watch out for snakes!)

Hat (with wide brim)

Sunscreen

Sunglasses

Water bottles (we will provide ice water, as well)

Sturdy foot gear (with likelihood of getting wet/muddy)

Tevas or old sneakers work well; please stay on the path!

Cameras (with film)

Binoculars (for bird watchers)

## **Drivers of vehicles (NAU personnel)**

Abe Springer

Charlie Schlinger

Other NAU faculty and students

#### Provided by VWREP/NAU

Lunch

Coolers for box lunches and beverages

Water coolers

Vans

Field trip handouts

Day trip bathroom facility (ammo can)

# **Trip Speaker Contacts:**

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