

## About the ALDER CREEK WATERSHED

An overview of the watershed and project accomplishments

Spring 2010

#### **WATERSHED STAKEHOLDERS**

The following stakeholders contributed time and resources to the development of the Alder Creek Watershed Management Action Plan:

#### Landowners

- Folsom Sphere of Influence (SOI) Landowner Group/ Consultants MacKay and Somps Engineers
- GenCorp/Consultants MacKay and Somps Engineers, ECORP
- US Bureau of Reclamation (open space managed by State Parks)
- Folsom Auto Mall Dealers Association/ERT Consultants
- Church of Latter Day Saints
- Teichert

#### **Local Government Agencies**

- City of Folsom Departments of Public Works (project lead); Community Development; Parks
- County of Sacramento Departments of Regional Parks; Planning and Community Development; Water Resources

#### **Environmental/Community Organizations**

- Sacramento Area Creeks Council
- Sacramento Valley Conservancy
- Folsom Adopt a Creek/Trail (ACT)
- Friends of Folsom Parkways

#### **Technical Resources**

- USGS, California Water Science Center
- California State University Sacramento, Office of Water Programs

The following additional stakeholders own or manage land, or otherwise have an interest in the watershed:

- Granite Construction (landowner)
- Tsakapalous Investments (landowner)
- Caltrans District 3 (U.S. Highway 50)
- Schools: Gold Ridge Elementary, Folsom High School, Folsom Lake College
- Existing residents north of Hwy 50 (e.g., Willow Springs and Broadstone neighborhoods)
- Businesses north of Hwy 50 (e.g., REI, Palladio Mall, Kaiser, Costco, Elliott Homes)
- Save the American River Association
- Regulatory Agencies: Central Valley Regional Water Quality Control Board, State Dept. of Fish and Game, US Fish and Wildlife Service, US Army Corps of Engineers

From its headwaters south of White Rock Road in unincorporated Sacramento County, Alder Creek travels northwesterly through grazing lands and blue oak woodlands in Folsom's Sphere of Influence (SOI), through the wooded Aerojet/GenCorp property, and alongside the Folsom Auto Mall, to its confluence with the Lower American River at Lake Natoma. About 11 square miles of land drains to the creek and it's tributaries; we call this land the Alder Creek Watershed (see map on next page).

Historically, the watershed was inhabited by Nisenan Indians, followed by gold mining companies, and then by ranchers. Today, the watershed is home to many residents and



Upper Alder Creek after a winter rain storm

businesses north of U.S. 50, as well as a diversity of animals, fish and aquatic life, insects, plants and trees, including several threatened and endangered species and a spectacular blue oak woodland. In the future, the land south of the freeway is proposed to develop with new homes, businesses, schools, and protected open space and parks. As development planning proceeds, it is important to consider impacts to the valuable natural resources of the watershed and take action to mitigate those impacts. At the same time, it is important to plan for new recreational opportunities to connect the watershed residents with Alder Creek and the American River Parkway.



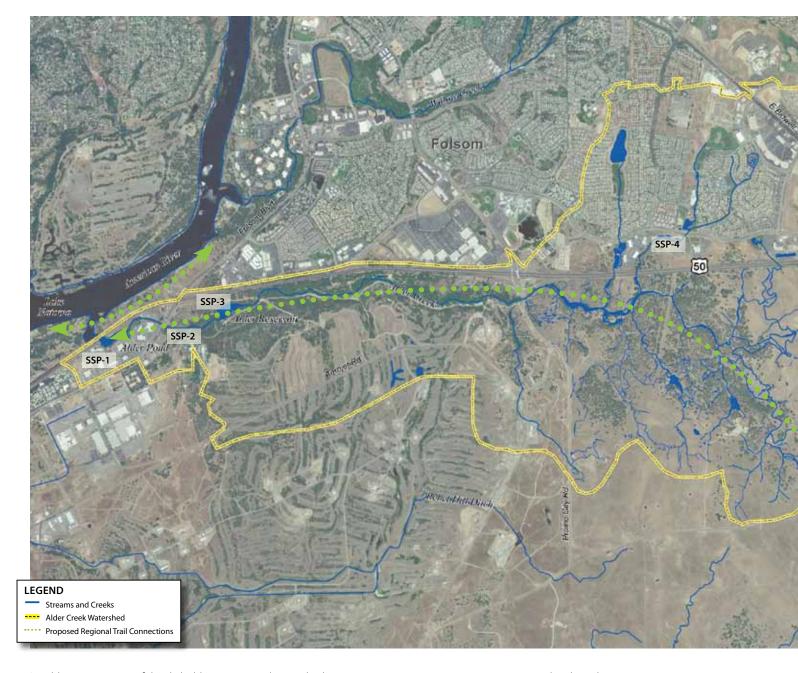
Upper Alder Creek during the dry summer months

In late 2006, the City of Folsom convened a diverse group of watershed stakeholders and embarked on a 3-year planning process to study the watershed. The work was funded by a CALFED/ State Department of Water Resources Grant made possible by Proposition 50. The study found the water quality and aquatic habitat functions of Alder Creek in the undeveloped portion of the watershed to be in good health as compared to other urban creeks in the Sacramento Valley. There are many opportunities to preserve the existing habitat and protect water quality, but there are also significant challenges

to preserve these values in the face of future development. Identifying and understanding these opportunities and challenges was an important first step in recommending policies and projects to protect the watershed.

The Alder Creek Watershed Management Action Plan, completed by the City of Folsom and its partners in February 2010, synthesizes a wide range of environmental data to characterize current conditions. The Plan recommends strategies to protect, enhance and restore the creek and associated natural resources in the future. It is an advisory document to guide development planning and future management options. Key recommendations of the Plan are summarized on the next page.

#### Recommended Actions To Protect the Alder Creek Watershed



In addition to a successful stakeholder process and watershed assessment, the main outcome of this project was the Watershed Management Action Plan and its recommended policies and projects for watershed protection. Two types of recommended policies are described in the Plan, for consideration and reference by property owners, developers, Folsom and Sacramento County when planning future development and conditioning and approving projects:

- 1. policies for development planning, and
- 2. policies for development design and implementation.

### Policies identified for development planning generally cover the following categories:

- $\boldsymbol{\cdot}$  land use design for watershed protection,
- · water quality protection,
- protection of hydrologic and geomorphic processes and functions,
- · protection of wildlife, plant communities, and habitat,

- · recreation opportunities and trails, and
- · long-term management of preserved natural lands.

Policies identified for development design and implementation compliment the development planning policies and provide a higher level of detail to address site-level design considerations. The recommendations generally cover the following categories:

- · water-sensitive urban design,
- · tributary drainage design,
- · stormwater detention basin design,
- · stormwater outfall design and location,
- · creek crossing design,
- · trail designs that maintain water quality, and
- natural (biotechnical) methods for streambank stabilization and protection.

# SSP-4 Neighborhood detention basins on the north side of U.S. 50 are becoming clogged with aquatic weeds due in part to polluted runoff. Aerial Image: ArcGIS Online 2008 X 07110004.01 042 2/10

Source: NHC 2009, ECORP unpublished data, Sacramento County 2007, compiled by AECOM 2010

**SSP-1** Alder Pond next to the auto mall in the lower watershed suffers from poor water quality conditions and needs additional study and restoration.



SSP-2/3 Alder Reservoir in the middle watershed is formed by an historic dam that requires additional study and a long-term management plan.

#### Summary of Recommended Projects for the Alder Creek Watershed

#### Watershed-wide Projects (WWP)

Project #	Project Name	Brief Description of Project
WWP-1	Advisory Committee to Recommend Gov- ernance Structure for Watershed Steward- ship Group	Convene an advisory committee to study and recommend preferred governance structure for a future watershed stewardship group.
WWP-2	Establish Watershed Stewardship Group	Establish an organized body to plan, prioritize and oversee implementation of actions recommended in the <i>Alder Creek Watershed Management Action Plan</i> (Plan).
WWP-3	Establish the Alder Creek Watershed Coordinator Position	Seek/secure funding for, and establish a coordinator position to manage implementation of actions recommended in the Plan.
WWP-4	Invasive Weed Removal Strategy	Locate invasive weed species throughout the watershed and plan removal strategies for each species.
WWP-5	Tree Planting Program	Collaborate with the Sacramento Tree Foundation, Friends of Folsom Parkways and others to plan and prioritize tree planting projects in the watershed.
WWP-6	Water Use Efficiency Outreach and Education	Develop outreach materials and educational curricula to educate residents and students about the links between water use efficiency and healthy groundwater/surface water conditions and habitat.
WWP-7	Promote River Friendly Landscaping in the Alder Creek Watershed	Promote River Friendly Landscaping application in the watershed through training, outreach and demonstration gardens.
WWP-8	Watershed Open Space/Conservation Easement Catalog	Track/map open space lands and associated mitigation requirements as a means to promote more strategic open space planning throughout the watershed.
WWP-9	Connected Creek Trails, Open Space, and Interpretive Signage	Provide a continuous system of trails and open space in the watershed, connecting future regional trails south of the Folsom SOI with the American River Parkway. Collaborate with watershed stakeholders to design and install interpretive signage.
WWP- 10	Alder Creek Watershed Stewardship Program	Establish a stewardship program for the developing area of the watershed south of U.S. 50 that builds on existing successful Folsom Adopt a Creek/Trail program. Seek opportunities to partner with businesses in the watershed.
WWP- 11	Alder Creek Watershed Monitoring Program	Monitor and document various attributes of the watershed to determine how resource conditions respond to development changes. Measure performance and success of Plan implementation.

#### Site-Specific Projects (SSP)

Project #	Project Name	Brief Description of Project
SSP-1	Alder Pond Restora- tion and Manage- ment	Prepare and implement a restoration and management plan to remedy past stream alteration effects by restoring/improving the physical and biological functions and values in Alder Pond and Alder Creek.
SSP-2	Alder Creek Channel and Floodplain Restoration	Reconfigure the altered and degraded reach of Alder Creek down- stream of the dam to restore channel and floodplain interactions, functions, and processes.
SSP-3	Natomas Company Dam / Alder Reservoir Management	Evaluate Natomas Company Dam and make any necessary improvements to ensure that it meets minimum stability requirements. Prepare a long term management plan for Alder Reservoir that addresses water quality, pond sediments, aquatic and riparian vegetation, and, if desired, recreational access.
SSP-4	Stormwater Detention Basin Management	Develop and implement a management plan for detention basins to control nuisance aquatic weed growth caused in part by nutrients in urban runoff. Expand volunteer creekside weed abatement program to include detention basins.

#### An Introduction to Watersheds

#### Do you know what a watershed is?

Don't feel bad if you don't. Many residents don't know what a watershed is, let alone how important a watershed is to our local environment.

A watershed is the land area that drains water into a creek, river, lake, wetland, or groundwater aquifer. In Folsom and Sacramento County, all the water from rain and irrigation which flows over the land surface (called runoff) goes into storm drains and creeks that flow directly to the American and Sacramento Rivers. What watershed do you live in? Visit <a href="http://creeks.folsom.ca.us">http://creeks.folsom.ca.us</a> to find out.

#### Why are watersheds important?

Watersheds are more than just drainage areas in and around our communities. They are necessary to support habitat for plants and animals, and they provide drinking water for people and wildlife. They also provide opportunities for recreation and enjoyment of nature. Protection of the natural resources in our watershed is essential to maintain the health and well being of all living things—both now and in the future.

#### How does pollution affect our watersheds?

Pollutants enter waterways through storm drains that collect and convey runoff from most property and streets in our community. The storm drains on your street may be stenciled with "No Dumping—Flows to Creek" or a similar message. Water flowing through these storm drains is untreated and can carry pollutants to our creeks, which eventually go to the rivers. Pollution in our watersheds degrades the environment, harms wildlife habitat, impacts the economy and jobs, and ultimately can affect the health of humans as well.

Pollutants such as motor oil, paint products, pet waste, litter, sediment, and chemicals such as fertilizers and pesticides are washed by rain and over watered lawns into neighborhood gutters and storm drains. Residents and businesses can take steps in their day-to-day activities to keep these harmful pollutants out of the storm drains and waterways.

Folsom ACT volunteers help the City to keep our creeks pollution and weed-free for the enjoyment of residents and wildlife.

Pollutants such as motor oil, paint products, pet waste, litter, sediment, fertilizers and pesticides are washed by rain and over watered lawns into neighborhood gutters and storm drains. From here, the polluted runoff travels to ponds, creeks and rivers and can harm water quality and the ecosystem.



#### Easy Ways You Can Help Protect Your Local Watershed

- 1. Get involved in a local watershed stewardship group! Contact Folsom ACT at <u>www.folsomtrails.org</u>
- 2. Pick up your pet's droppings and dispose of them in the trash or toilet.
- 3. Wash your car on an unpaved area where soapy runoff cannot enter a storm drain, or better yet, take it to a commercial or "River-Friendly" fundraiser car wash. <a href="http://www.riverfriendlycarwash.com">http://www.riverfriendlycarwash.com</a>
- 4. Never dispose of used pesticides, fertilizers, motor oil or antifreeze in the storm drains. Contact Folsom Hazmat for pickup of hazardous wastes. <u>www.folsomhazmat.com</u>
- 5. Time your sprinklers to avoid over-watering your yard to eliminate or reduce runoff, which can carry fertilizers and pesticides to creeks and rivers. <a href="http://iconserve.folsom.ca.us">http://iconserve.folsom.ca.us</a>
- 6. Report pollution and drainage problems! Visit http://creeks.folsom.ca.us to learn how.

Thank You! By protecting watersheds, creeks and rivers, you are helping to preserve these natural resources for yourself, your children and future generations.

#### Alder Creek



For More information
Contact: Sarah Staley,
sstaley@folsom.ca.us
http://creeks.folsom.ca.us



Field studies showed that Alder Creek is in relatively good health compared to other urban creeks in the region.

"The goal of the Alder Creek
Watershed Project was to gather
stakeholders together to study
and characterize valuable natural
conditions and recommend
actions to protect the health of the
watershed and the creek in light of
planned future development."