

## **DRAFT Constraints, Opportunities, and Desired Outcomes**

Yolo Natural Heritage Program Riparian Conservation Strategy Workshop 10/26/09

***The following themes were derived from a stakeholder discussion at the October 26, 2009 Steering Advisory Committee Riparian workshop and are provided for information purposes in advance of the December 14, 2009 discussion***

### **CONSTRAINTS**

1. Reduction of the agricultural land base by riparian habitat restoration is a concern for agriculture-dependent Yolo County.
2. Agricultural land values (\$) may impede acquisition for riparian restoration.
3. Trust between private landowners and riparian advocates is essential and not always present.
4. Federal and state funds for conservation are declining which limits capabilities for action. Clear targets (acreage, species, etc.) are needed to obtain funding. Adequate local staffing is needed to achieve plan goals and objectives.
5. Climate change creates uncertainty about future conditions for planning.
6. Some agricultural landowners may be reluctant to accept habitat restoration because they view it as a source of undesirable species.
7. Private ownership makes habitat loss likely over time, due to potential changes in land ownership and use. It is currently difficult for agriculture to stay in business and avoid development of agricultural land.
8. Flood control and water supply needs limit riparian enhancement and management opportunities. Lack of available water and in stream flow protection are additional factors constraining riparian habitat.
9. A complex, costly, and bureaucratic plan would be hard explain to the public and difficult to implement.

### **OPPORTUNITIES**

1. A comprehensive plan offers opportunities to accomplish important long-term objectives for restoring habitat and essential connectivity, preserving agriculture, and protecting species
2. Public interest in environment and natural resources issues are high in the Central Valley now – especially for water-related issues.
3. Opportunities exist for improving communication to the public and among different stakeholders, and for engaging a broad range of interests and groups, including educating private landowners on the benefits of riparian management and restoration.
4. Private sector funding and involvement is a potential source of support.

5. The Yolo County farm community is generally supportive of habitat and restoration goals. Diverse groups are developing a common vision in the County. The YNHP can be integrated with other related activities in the county, including
  - interest in controlling invasive species and restoring native plants
  - FloodSAFE Yolo and the IWRMP
  - the Cache Creek Management Plan, and other area resource plans
  - other HCP efforts to restore aquatic endangered species (e.g. BDCP)
  - other conservation programs (e.g. the Williamson Act).
  - *Others?*

## **DESIRED OUTCOMES**

1. Incorporate riparian management into agricultural management:
  - Integrate diverse ideas, including inviting landowners to be part of the process.
  - Reduce concerns about harboring and harming listed species, which may be discouraging some landowners from maintaining habitat
  - Create an incentive-based program.
  - Create a balanced plan between agriculture and species protection; work together so that agriculture can provide food for people and species.
2. Preserve and enhance riparian habitat in Yolo County in a practical, workable and dynamic way.
  - Establish connected corridors.
  - Achieve a connected functional network of natural community types.
  - Integrate aquatic and terrestrial conservation and management efforts.
3. Create a functional description of riparian habitat; establish acreage targets by landscape unit.
4. Incorporate water protection goals
5. Achieve regulatory certainty through the permit process.
6. Make it easier to preserve cultural resources through clear compliance rules.

## Staff Communication

TO: Advisory Steering Committee Chair and Members, and Riparian Stakeholders

FROM: Maria Wong  
Executive Director

DATE: December 14, 2009

SUBJECT: **Item 3: Response to Information Requests Made at the October 26, 2009 Meeting**

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### 1. Provide more information on the riparian vegetation classification and mapping approach

**Vegetation Mapping.** Much of the vegetation mapping developed for the Yolo NHP was incorporated from other sources to increase efficiency, avoid duplicative efforts, and reduce cost. Outlined below is a description of these sources and a discussion regarding the classification system developed to integrate these materials.

The process for developing the vegetation map is described in the mapping metadata, which is accessible on the Yolo HNP web site (<http://yoloconservationplan.org/regionalveg.html>). Existing mapped data sources were brought into a single database and standardized through “crosswalks” of the various classification systems used in previous mapping, a common methodology used in landscape level conservation planning. Major data sources for Yolo NHP mapping are:

- UC Davis (UCD), California Department of Fish and Game (CDFG), and Aerial Information Systems (AIS) jointly mapped habitats in Napa County that extended into the Blue Ridge and Little Blue Ridge region of Yolo County. That map was created using the Manual of California Vegetation (MCV) classification system (, aerial photo interpretation, and limited field verification.
- California Department of Water Resources Land Use Map DWR to map and quantify agricultural land.
- EIP Associates’ classification and mapping and other data compiled for the initial 2001 HCP, for certain habitats in the eastern and valley portions of the current YNHP area.
- Bay/Delta Vegetation Mapping dataset was created by Aerial Information Systems, Inc. for the CDFG using the CDFG's vegetation classification and mapping program for the Delta Region
- Sacramento River and Major Tributaries Riparian Zone Mapping by Chico State University along the Sacramento River and its major tributaries to the ends in the foothill canyons.
- Jones and Stokes Riparian Zone Mapping field level riparian mapping for a significant portion of the valley bottoms and lower slopes of Yolo County during the winter 1989 and spring 1990 for the Yolo County Community Development Agency. The final product was

a set of hard copy maps, which the YNHP consultant team digitized, reviewed, and compared with 2004 digital orthophotos.

- Limited areas where existing vegetation mapping were unavailable were interpreted by the consultant team from aerial photography. Much of this new mapping was done with limited field verification, because lack of access to private lands and inadequate funding to conduct detailed verification.

As noted in the more detailed description of the mapping process on the web sites:

*"It is very important to note that although the Yolo County vegetation/landcover layer is a seamless layer, the mapping is a product from data sources that had different mapping methods... driven by their unique purpose... While this effort to compile the Yolo County vegetation/landcover GIS layer worked to standardize this through classification crosswalks and supplemental mapping, some areas still appear inconsistent compared to other areas. Additionally, the mapping precision ... will vary considerably. [Therefore], all spatial or categorical assessments of this GIS layer should be conducted with an understanding of the intended purpose of this data: conservation planning at a Regional level."*

Additional information on vegetation mapping is provided in the Environmental Baseline Report ([http://yoloconservationplan.org/yolo\\_pdfs/reports/env\\_baseline\\_rpt\\_07\\_19\\_2005\\_v2.pdf](http://yoloconservationplan.org/yolo_pdfs/reports/env_baseline_rpt_07_19_2005_v2.pdf)).

**Mapping Scale and Rules.** The scale of mapping and approaches used in delineating vegetation polygons varies for different vegetation types and geographic areas because of the varied sources of information compiled for the NHP. Table 1 provides a size frequency distribution for riparian and wetlands habitat polygons in the NHP GIS. Over half of the mapped polygons are <0.5 acres in size, and 89% of polygons are <5 acres.

**Vegetation Classification and Description.** The Yolo NHP vegetation classification system accommodates both the needs of the planning process and the limitations posed by the classifications previously used in the available vegetation information incorporated into the plan's vegetation system. As described in the draft of NHP Chapter 2, ([http://yoloconservationplan.org/yolo\\_pdfs/announcements/yolonhp-chapters/yolo-nhp-draft-ch2.pdf](http://yoloconservationplan.org/yolo_pdfs/announcements/yolonhp-chapters/yolo-nhp-draft-ch2.pdf); see Pp. 2-16 to 2-20.), the project has incorporated a 3-tiered classification system, with 6 Communities (including 4 natural communities and 2 anthropogenic communities), 28 habitat types, and 104 vegetation types (including both natural vegetation and agricultural crops). Communities and habitat types are described in Chapter 2.

The NHP vegetation types are named to be as consistent as possible with the alliances identified in the first edition of *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Many of the riparian and wetlands vegetation types, however, are designated as "super alliances", indicating a vegetation type that may be composed of one or more individual alliances, which could not be identified and or distinguished from one another based on available information. Descriptions of these vegetation types are in preparation, derived from the descriptions for the different mapping effort incorporated into the Yolo NHP mapping effort.

## **2. Clarify the riparian vegetation type: *IntermittentlyFlooded to Saturated Deciduous Shrubland***

This vegetation type is a broad category that does not directly correspond to a type designated by Sawyer and Keeler-Wolf (1995). As mapped, the type appears to correspond to the *Great Valley riparian scrub* type as identified and mapped by Chico State for the Sacramento River and Major Tributaries Riparian Zone mapping project. We are researching why this type was recognized separately from the *mixed willow super alliance* and will provide more information when it is available.

### **3. Provide examples of mapping of water courses and riparian vegetation types**

Maps depicting watercourses will be presented at the December 14th meeting of the Steering and Advisory Committee and Riparian Stakeholders.

**Table 1. Size class distribution of riparian and wetland vegetation polygons in the Yolo Nature Heritage Program's Geographic System.**

Habitat Association	Vegetation Type	Polygon Size (ac)										Total # Polygons
		<0.5	≥0.5-1.0	≥1-2	>2-5	>5-10	>10-20	>20-50	>50-100	>100-200	>200	
Alkali Sink	Alkali Sink	1	2	1	3		3	3	5		1	19
Fresh Emergent Wetland	Alkali Bulrush - Bulrush Brackish Marsh Super Alliance	18	6	1								25
	Bullrush - Cattail Wetland Alliance	29	17	7	8	7	2	6	1	2		79
	Bulrush - Cattail Fresh Water Marsh Super Alliance	76	41	34	35	23	20	21	5	5	3	263
	Carex spp. - Juncus spp - Wet Meadow Grasses Super Alliance	44	21	18	15	11	12	3	1	1		126
	Crypsis spp. - Wetland Grasses - Wetland Forbs Super Alliance	32	10	15	27	26	19	20	13	9	6	177
Open Water	Open Water	1,523	194	188	156	78	47	28	8	9	12	2,243
Saline Emergent Wetland	Perennial pepperweed (Lepidium latifolium) Alliance	4	3	9	7	8	2	4				37
	Saltgrass Alliance	6		8	7	10	6	7	7	3	2	56
Valley Foothill Riparian	Blackberry Super Alliance	75	25	16	13	4	1	1	1			136

	Coyote Brush	26	11	5	8	6	6	1				63
	Fremont Cottonwood - Valley Oak - Willow (Ash - Sycamore) Riparian Forest Association	356	165	154	138	69	28	19	11	1		941
	Giant Reed Series	79	23	19	8	3						132
	Great Valley Valley Oak Riparian Association	38	6	5	10	1	1					61
	Intermittently Flooded to Saturated Deciduous Shrubland	444	112	58	49	21	18	6		1		709
	Mixed Fremont Cottonwood - Willow spp. Alliance	233	79	78	71	25	11	2			1	500
	Mixed Willow Super Alliance	573	119	101	115	38	35	9	3			993
	Tamarisk Alliance	442	78	41	34	13	6	1				615
	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest Association	15										15
	Valley Oak Alliance - Riparian	660	100	118	140	67	47	22	3	1	1	1,159

	White Alder (Mixed Willow ) Riparian Forest Association	52	10	9	3	1	1					76
Vernal Pool Complex	Vernal Pool Complex	20	9	9	6	7	1	2	2	1		57
Total		4,746	1,031	894	853	418	266	155	60	33	26	8,482
Percent		56	12	11	10	5	3	2	1	0	0	

## **Riparian Habitat Definitions and Uses in other Northern California HCPs and Other Sources**

At the October 26, 2009 meeting of the Yolo HCP Steering and Advisory Committee and Riparian Stakeholders, participants discussed the need for a definition of riparian areas. Participants agreed to bring candidate definitions to discuss at the subsequent meeting, now scheduled for December 14, 2009. The following riparian definitions used in approved and developing HCPs in Northern California, and other readily available sources are provided below in advance of continued discussion regarding a Yolo NHP riparian definition.

### **HCP Definitions and Uses**

#### **East Contra Costa and Santa Clara Valley HCPs**

Vegetation associated with river, stream, or lake banks and floodplains.

#### **Solano County HCP (draft)**

The transitional zones between aquatic and terrestrial (or upland) environments. Riparian areas occur as a belt along the banks of rivers, streams, and lakes. Riparian areas occurring along the banks of moving water (i.e., streams or rivers) are often called lotic systems whereas those occurring along the banks of stationary water (i.e., lakes, ponds, or pools) are called lentic systems. As a transitional zone between aquatic and upland environments, riparian systems often exhibit characteristics of both; but they are not as dry as upland environments and not quite as wet as aquatic or wetland systems.

#### **San Joaquin County HCP**

Not defined in glossary. In Conservation Strategy plan states: Restore and or expand riparian areas ... in areas where soils are wet regularly by planting appropriate riparian vegetation. Target areas that regularly flood.

#### **BUTTE REGIONAL HCP (draft)**

Riparian habitat: Vegetation associated with river, stream, or lake banks and floodplains.

### **Web Source Definitions**

The aquatic and terrestrial habitat adjacent to streams, lakes, estuaries, or other waterways. [www.streamnet.org/pub-ed/ff/Glossary/glossaryhabitat.html](http://www.streamnet.org/pub-ed/ff/Glossary/glossaryhabitat.html)

Areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands. ([www.lasgrwc.org/LandscapeEthic/GlossaryNov17.doc](http://www.lasgrwc.org/LandscapeEthic/GlossaryNov17.doc))

A habitat that is strongly influenced by water and which occurs adjacent to streams, shorelines, and wetlands. ([www.dnr.state.md.us/criticalarea/glossary.html](http://www.dnr.state.md.us/criticalarea/glossary.html))  
Habitat that is next to, or affected by, water sources such as rivers, creeks, lakes and springs. These areas often shelter plants and animals that couldn't survive in nearby areas. [www.opb.org/programs/oregonstory/land\\_trusts/glossary/index.html](http://www.opb.org/programs/oregonstory/land_trusts/glossary/index.html)

Plant communities that occur in association with any spring, cienega, lake, watercourse, river, stream, creek, wash, arroyo, or other body of water. Riparian habitats can be

supported by either surface or subsurface water sources.  
([rfcd.pima.gov/district/glossary.htm](http://rfcd.pima.gov/district/glossary.htm))

The transition zone between aquatic and upland habitat. These habitats are related to and influenced by surface or subsurface waters, especially the margins of streams, lakes, ponds, wetlands, seeps, and ditches ([www.sjrwmd.com/archydro/glossary.html](http://www.sjrwmd.com/archydro/glossary.html))  
An ecosystem in proximity to a consistent source of water.  
([ernewartist.org/BotanicalGlossary01.htm](http://ernewartist.org/BotanicalGlossary01.htm))

“Riparian habitat’ means lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” Cal Fish & G Code § 2785(e) (2009) California Wildlife Protection Act of 1990

Riparian Area: “A type of habitat occurring along the bank of a water course or other water body typically consisting of water tolerant trees and shrubs such as alder, cottonwood, and willows.” California Coastal Commission  
<http://www.coastal.ca.gov/wetrev/wetglos.html>

## Staff Communication

TO: Advisory Steering Committee Chair and Members, and Riparian Stakeholders

FROM: Maria Wong  
Executive Director

DATE: December 14, 2009

SUBJECT: **Item 4: RIPARIAN STAKEHOLDER INPUT PROCESS**

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The following steps outline staff's proposal to ensure that riparian stakeholder's are provided an opportunity to contribute to the development of the riparian strategy component of the Yolo Natural Heritage Program (HCP/NCCP). Development of the conservation strategy is iterative and layered. Initial steps involve development of a riparian conservation strategy draft proposal which will be integrated into the larger conservation planning effort. Later steps include development of the Adaptive Management and Monitoring component of the conservation plan.

### Draft Riparian Stakeholder Input Process

- ◆ Convene the first in a series of public workshops focused on development of a draft Riparian Conservation Strategy for the Yolo Natural Heritage Program. The purpose of the first workshop is to:
  - Create a shared understanding regarding riparian conservation under the Yolo HCP/NCCP.
  - Identify constraints, opportunities and desired outcomes.
- ◆ Conduct a second public workshop
  - Confirm common themes from first workshop.
  - Continue discussion with the goal of identifying common ground and capturing issues that are more appropriately addressed in the Adaptive Management and Monitoring, and financing sections of the conservation plan.
  - Assuming sufficient common ground exists and no significant information gaps have been identified, the consultant team will prepare a “straw proposal” for discussion purposes at the third public workshop.
- ◆ Conduct a third public workshop
  - Riparian stakeholder discussion/comments on consultant team straw proposal.
  - If sufficient support exists for the “straw proposal”, the SAC may refer the proposal to the SAC Biological Working Group for more discussion, or recommend that the consultant team continue integrating the draft riparian strategy into the larger conservation effort.
  - If insufficient support for the “straw proposal” exists, identify areas where improvement is needed.
  - If necessary, schedule a fourth riparian stakeholder workshop.
- ◆ Riparian workshops will reconvene during development of Adaptive Management and Monitoring Chapter.

## **YOLO NATURAL HERITAGE PROGRAM GUIDING PRINCIPLES**

Adopted November 2008

- The planning process will be a collaborative effort that is open, inclusive, and actively participatory.
- Everyone participating in the process will be treated with respect, dignity, courtesy and responsiveness, and the same will be expected from them.
- When shared values and goals are identified, they will be articulated and written into the Plan.
- Partnerships that promote the Plan and its implementation will be cultivated.
- The planning process will be conducted in a cost effective and efficient manner without compromising conservation values and goals.
- Administration of the program will provide predictability, permit streamlining, and efficiency related to state and federal regulatory programs and protect covered species, including endangered species.
- The process and the Plan will complement other efforts designed to protect, enhance, restore, and manage biodiversity, as well as natural and intrinsic resource values in Yolo County. The process will seek to leverage local, state, and federal funding to help achieve the Plan's goals and objectives.
- The Plan shall be based on a strong scientific foundation.
- The Plan shall assemble a shared knowledge base that describes the key concepts of the HCP/NCCP planning process.
- The Plan shall encourage farmland and rangeland management practices that are compatible with species and habitat conservation objectives.
- The Plan is based on willing participants and sellers interested in preserving their land and the predominantly rural and agricultural character of Yolo County for future generations.
- The goal of the Plan is to restore, enhance, and conserve the natural heritage of Yolo County, while encouraging smart, sensible, and sustainable economic activity, maintaining and enhancing agricultural production, and including and expanding recreational opportunities.

## **YOLO HABITAT JPA STEERING COMMITTEE MEETING GUIDELINES**

Purpose: The primary purpose of the Steering Committee is to assist in the preparation of the Yolo County HCP/NCCP. The Steering Committee will accomplish this by conducting a careful review of all relevant materials and documents, introducing, evaluating and synthesizing ideas and information, and engaging in meaningful discussion to resolve complex issues and reach the greatest possible stakeholder consensus. Based on a thorough review, evaluation and discussion of the Yolo County HCP/NCCP, the Steering Committee will provide recommendations to the JPA Board.

Members. Steering Committee members are appointed by the JPA Board to represent the various stakeholder interest groups. Each Committee member acts as a conduit between the Steering Committee and the interest group they represent, informing and providing input to both. Primary members (the members personally appointed by the JPA Board) or their organizations may select an alternate, and are encouraged to work closely with their alternates to ensure that they “speak with one voice”. Only primary members participate in the process of formulating recommendations, as defined below.

Consulting Team. The Consulting Team serves as a source of scientific, policy, economic and legal expertise appropriate to the development of the NCCP/HCP and works on behalf of the entire NCCP/HCP process. At the request of the Consulting Team, Committee members will work to address specific issues or undertake certain tasks necessary to advance the development of the plan.

Facilitator. The Facilitator’s role is to help the Steering Committee reach agreement between as many of the participants as possible on as many of the issues as possible. The Facilitator will help the Committee define goals, identify and resolve issues, develop and maintain critical paths and engage in creative problem solving.

Chairperson. The Committee will select a chairperson who will represent the Steering Committee at JPA Board meetings by fairly reporting all views of Committee members.

JPA staff. JPA staff will assist with meeting facilitation and coordination, and also acts as liaison between the Committee and both JPA Board and the Consulting Team.

Meetings. The Steering Committee is anticipated to meet monthly but may vary its schedule on an as-needed basis. JPA staff will be responsible for preparing and posting meeting notices, agendas and minutes on a timely basis. Meetings will called, noticed, held and conducted in accordance with the provisions of the Brown Act.

Attendance. Members will make every effort to attend meetings and inform the JPA staff in advance of absences or changed circumstances.

Preparation. Members agree to come prepared for meetings, having reviewed all previously distributed material related to an agenda item. JPA staff will make related agenda item materials available by email to each member one week in advance of the scheduled meeting. Members will have sufficient time to review material and proposed solutions so that they can meaningfully participate before being asked to provide input.

Contribution. Each member is encouraged to be a willing contributor at meetings, to communicate actively, to share relevant technical information, and to strive for consensus on a timely basis. Each member is expected to be open minded, to listen to others, to respect other's points of view, to be direct and considerate, to show respect for the other members, to suggest solutions, and be willing to explain their concerns to others.

Authority. If a member does not have the authority to bind his/her organization, the member agrees to keep his/her organization informed on an on-going basis about the issues before the Committee, including possible solutions to those issues.

Information. Information provided to the Committee may include information that is draft or preliminary. Members agree to treat such information accordingly.

Brainstorming. Members will be encouraged to "brainstorm" a variety of solutions to specific issues. Ideas presented by members will not be considered binding or final until or unless they become part of a final recommendation agreed to by the Committee.

Formulating recommendations. The Steering Committee will attempt to reach agreement on its recommendations by consensus. Consensus is achieved when all members can accept the decision being made, recognizing that while an action may not be the preferred result, it represents a fair way of responding to the needs of the participating interests. Although the Committee will strive for consensus, if after thoroughly identifying, exploring, discussing and considering an action the Committee fails to reach a strict consensus of 100% agreement, the Committee may then reach a decision by a 60% super-majority vote of primary committee members. If the 60% super-majority vote fails to resolve an issue, the Chairperson will report the outcome to the JPA Board.

Resolving conflicts. The facilitator will use a variety of dispute resolution techniques to work through difficult issues.

Tracking issues and resolutions. The JPA staff will prepare and maintain an annotated "list of issues" that identifies specific issues, status of the issues, and resolutions. Members will make every effort to move forward once decisions have been made and to limit requests that the committee revisit decisions. However, the availability of new information or changed circumstances will be a legitimate reason to revisit past decisions. New members, or members who are absent from meetings, are expected to "get up to speed" by asking for a separate briefing by JPA staff or the Facilitator outside of regularly scheduled Committee meetings.