

## Section 1

### Existing conditions:

This section starts with a dirt path leading down from a greenbelt park. Probably one of the most highly used sections of the channel. There are already a lot of trees on the greenbelt here and the residential area to the north. There are some native willow, sedges, and rushes along the low flow channel.

### Design Plan

In general, trees over 5" diameter at breast height will remain on site.

#### Forb Strip

native vegetation: 4 foot mowable mix of annual and perennial wildflowers

Initial establishment: 1. preliminary weed management, 2. plant plugs of sow seed mix, 3. mow for weed management, 4. reseed or re-plant as needed, 5. mow for weed management (spot spray if necessary) until established

Long term maintenance (no net change): City of Davis adapt timing of typical maintenance regime to mow once a year in the fall

Long term benefits: biological diversity and pollinator habitat

#### North bank

native vegetation: Matrix of flowering and fruiting shrubs and ground cover

Initial establishment: 1. preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term Maintenance (lower): very low. weed management as needed

Long term Benefits: Enhance wildlife habitat especially for birds. lower maintenance of the channel. improve bank stability

#### Edge of Low flow channel

native vegetation: double row of grasses, sedges, perennials, and rushes. narrowleaf milkweed project would include a plant every 20 feet.

Initial establishment: 1. preliminary weed management, 2. planting plugs, 3. mulching around plugs and install biodegradable plant shelters, 4. follow-up weed management 5. replacement of plants as needed, 6. weed management until establishment

long term Maintenance (no net change): very low. Weed management as needed

Long term benefits: improved bank stabilization and water quality. enhance wildlife habitat. enhance aesthetics of the channel. monarch habitat creation and UCD milkweed and monarch habitat research advancement

#### Floodplain Meadow

native vegetation: Grassland restoration from channel to south slope shrub line

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

#### South bank

Native vegetation: one row of low firesafe understory shrubs approximately 4 feet from the top of the south bank slope. a mix of mowable, firesafe perennial grasses on the south bank slope

Initial Establishment (Understory): 1. Preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): Very low for understory planting. incorporate into routine greenbelt maintenance. City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

## Section 2

### Existing conditions:

Valley oaks are already establishing themselves on the south bank and should be protected. There are already trees on the greenbelt here and the residential area to the north. There are some native willow, sedges, and rushes along the low flow channel.

### Design Plan

In general, trees over 5" diameter at breast height will remain on site

#### Forb Strip

native vegetation: 4 foot mowable mix of annual and perennial wildflowers

Initial establishment: 1. preliminary weed management, 2. plant plugs of sow seed mix, 3. mow for weed management, 4. reseed or re-plant as needed, 5. mow for weed management (spot spray if necessary) until established

Long term maintenance (no net change): City of Davis adapt timing of typical maintenance regime to mow once a year in the fall

Long term benefits: biological diversity and pollinator habitat

#### North bank

native vegetation: Matrix of flowering and fruiting shrubs and ground cover

Initial establishment: 1. preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term Maintenance (lower): very low. weed management as needed

Long term Benefits: Enhance wildlife habitat especially for birds. lower maintenance of the channel. improve bank stability

#### Edge of Low flow channel

native vegetation: double row of bunch grasses, sedges, perennials, and rushes. narrowleaf milkweed project would include a plant every 20 feet.

Initial establishment: 1. preliminary weed management, 2. planting plugs, 3. mulching around plugs and install biodegradable plant shelters, 4. follow-up weed management 5. replacement of plants as needed, 6. weed management until establishment

long term Maintenance (no net change): very low. Weed management as needed

Long term benefits: improved bank stabilization and water quality. enhance wildlife habitat. enhance aesthetics of the channel. monarch habitat creation and UCD milkweed and monarch habitat research advancement

#### Floodplain Meadow

native vegetation: Grassland restoration from channel to south slope shrub line

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

#### South bank

Native vegetation: one row of low firesafe understory shrubs approximately 4 feet from the top of the south bank slope. a mix of mowablefiresafe perennial grasses on the south bank slope

Initial Establishment (Understory): 1. Preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): Very low for understory planting. incorporate into routine greenbelt maintenance. City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

## Section 3

### Existing conditions:

The farm edge starts here. There are a lot of cattails and some willows and ash in the channel. There's a wide flood plain that has room for a couple of groups of valley oaks along the toe of the south bank. Mature trees exist on the inside of the greenbelt fence. BIRD ENTRY PARK: The corner where Sections 3 and 4 meet is Alkaline Saline soil and also an armored bank.

### Design Plan

In general, trees over 5" diameter at breast height will remain on site.

#### Forb Strip

native vegetation: 4 foot mowable mix of annual and perennial wildflowers

Initial establishment: 1. preliminary weed management, 2. plant plugs of sow seed mix, 3. mow for weed management, 4. reseed or re-plant as needed, 5. mow for weed management (spot spray if necessary) until established

Long term maintenance (no net change): City of Davis adapt timing of typical maintenance regime to mow once a year in the fall

Long term benefits: biological diversity and pollinator habitat

#### North bank

native vegetation: Matrix of flowering and fruiting shrubs and groundcover. Appropriate tree species planted every 20-100 at the base of the slope above the low flow channel.

Initial establishment: 1. preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term Maintenance (lower): very low. weed management and replacement as needed

Long term Benefits: Enhance wildlife habitat for birds and pollinators. lower maintenance of the channel. improve bank stability and ecosystem function

#### Edge of Low flow channel

native vegetation: double row of bunch grasses, sedges, perennials, and rushes. milkweed project would include a plant every 20 feet.

Initial establishment: 1. preliminary weed management, 2. planting plugs, 3. mulching around plugs and install biodegradable plant shelters, 4. follow-up weed management 5. replacement of plants as needed, 6. weed management until establishment

long term Maintenance (no net change): very low. Weed management as needed

Long term benefits: improved bank stabilization and water quality. enhance wildlife habitat. enhance aesthetics of the channel. monarch habitat creation and UCD milkweed and monarch habitat research advancement

#### Floodplain Meadow

native vegetation: Grassland restoration. Include several clusters of Valley oaks along the base of the south bank

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

#### South bank

Native vegetation: one row of low firesafe understory shrubs approximately 4 feet from the top of the south bank slope. a mix of mowable firesafe perennial grasses on the south bank slope

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Initial establishment (understory component) same as North Bank.

Long term maintenance (no net change): Very low for understory planting. incorporate into routine greenbelt maintenance. City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

## Section 4

### Existing conditions:

This section runs north-south and has a uniform planting of eucalyptus and cotoneaster (double row) inside the greenbelt fence at the top of the Eastern slope. The slope (about 15-12 feet wide). The floodplain zone has existing carex. This flat area is 18-20 feet wide. There are no trees on the West bank (2:1 slope)

### Design Plan

In general, trees over 5" diameter at breast height will remain on site.

#### Forb Strip

native vegetation: 4 foot mowable mix of annual and perennial wildflowers

Initial establishment: 1. preliminary weed management, 2. plant plugs of sow seed mix, 3. mow for weed management, 4. reseed or re-plant as needed, 5. mow for weed management (spot spray if necessary) until established

Long term maintenance (no net change): City of Davis adapt timing of typical maintenance regime to Mow once a year in the fall

Long term benefits: biological diversity and pollinator habitat

#### West bank

native vegetation: Matrix of flowering and fruiting shrubs and ground cover

Initial establishment: 1. preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term maintenance (lower): very low. weed management as needed

Long term Benefits: Enhance wildlife habitat especially for birds. lower maintenance of the channel. improve bank stability

#### Edge of Low flow channel

native vegetation: double row of bunch grasses, sedges, perennials, and rushes. narrowleaf milkweed project would include a plant every 20 feet.

Initial establishment: 1. preliminary weed management, 2. planting plugs, 3. mulching around plugs and install biodegradable plant shelters, 4. follow-up weed management 5. replacement of plants as needed, 6. weed management until establishment

long term Maintenance (no net change): very low. Weed management as needed

Long term benefits: improved bank stabilization and water quality. enhance wildlife habitat. enhance aesthetics of the channel. monarch habitat creation and UCD milkweed and monarch habitat research advancement

#### Floodplain Meadow

native vegetation: Grassland restoration from channel to south slope shrub line

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: Reduced fire hazard, enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

#### East bank

Native vegetation: advise City of Davis to limb up Eucalyptus trees and trim down cotoneaster. On the bank itself, plant a native groundcover that is firesafe and does not require mowing.

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. plant with plugs or 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term maintenance (no net change): Very low for groundcover planting. incorporate into routine greenbelt maintenance.

Long term benefits: enhanced ecosystem function, beauty, improved stormwater infiltration

## Section 5

### Existing conditions:

Section #5 has areas without any mature trees on site or in the surrounding landscape. The in-channel floodplain zone has existing salt grass and some native trees. Soil Maps show this entire stretch to be in an alkaline saline soil complex. Existing vegetation supports this. Soils with high salinity and high pH are not appropriate for growing the majority of the plants recommended for typical soils.

North Davis Channel Advisory Committee recommended Design concepts:

In general, In general, trees over 5" diameter at breast height will remain on site and soil disturbance should be minimized

#### Forb Strip

native vegetation: 4 foot mowable mix of two alkaline saline tolerant wildflower species

Initial establishment: 1. preliminary weed management, 2. plant plugs of sow seed mix, 3. mow for weed management, 4. reseed or re-plant as needed, 5. mow for weed management (spot spray if necessary) until established

Long term maintenance (no net change): City of Davis adapt timing of typical maintenance regime to mow once a year in the fall

Long term benefits: biological diversity and pollinator habitat

#### North bank

native vegetation: Matrix of Alkaline saline tolerant shrubs and trees

Initial establishment: 1. preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term Maintenance (lower): very low. weed management

Long term Benefits: Enhance wildlife habitat especially for birds. lower maintenance of the channel. improve bank stability

#### Edge of Low flow channel

native vegetation: double row of alkali sacaton (native bunch grass. include alkali heath for increase pollinator support and biodiversity)

Initial establishment: 1. preliminary weed management, 2. planting plugs, 3. mulching around plugs and install biodegradable plant shelters, 4. follow-up weed management 5. replacement of plants as needed, 6. weed management until establishment

long term Maintenance (no net change): very low. Weed management as needed

Long term benefits: improved bank stabilization and water quality. enhance wildlife habitat. enhance aesthetics of the channel.

#### Floodplain Meadow

native vegetation: salt grass vegetation using plugs over seed with alkaline salini tolerant wildflower

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. No till range drill seeding in the late fall with wildflowers and plug plant salt grass, 3. two spring mows and a mow the following fall for weed control (spot spray broadleaf weeds as needed), 4. repeat for year two

Long term maintenance (no net change): City of Davis adapt typical mowing regime. Mow grasses (6 inches) once in the fall and once in the spring

Long term benefits: enhanced biodiversity, habitat, and beauty, improved stormwater infiltration

#### South bank

Native vegetation: one row of firesafe alkaline saline tolerant shrubs approximately 4 feet from the top of the south bank slope and spaced 8-15 feet apart. Firesafe groundcover on the south bank slope

Initial Establishment (shrub line): 1. Preliminary weed management, 2. planting 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Initial Establishment (Upland Meadow): 1. Preliminary weed management, 2. plant with plugs or 1-gallon and d-pot plants, 3. mulch around plants and install biodegradable plant shelters, 4. install temporary drip irrigation, 5. follow-up weed management, 6. weed management until establishment

Long term maintenance (no net change): Very low. incorporate into routine greenbelt maintenance.

Long term benefits: enhanced biodiversity, habitat, and beauty, improved stormwater infiltration