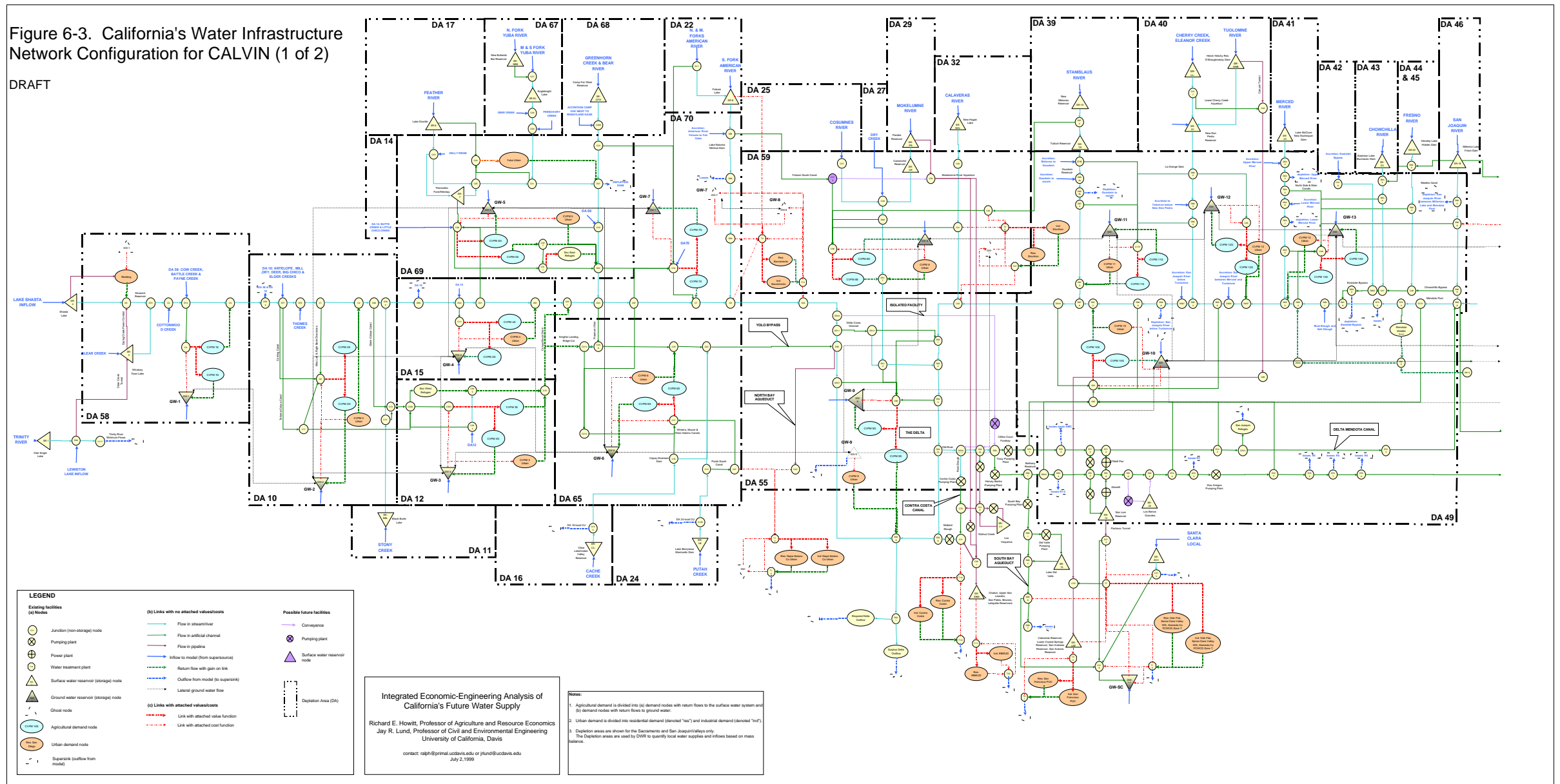


Figure 6-3. California's Water Infrastructure Network Configuration for CALVIN (1 of 2)

DRAFT



LEGEND

Existing facilities

(a) Nodes

- Junction (non-storage) node
- Pumping plant
- Power plant
- Water treatment plant
- Surface water reservoir (storage) node
- Ground water reservoir (storage) node
- Ghost node
- Agricultural demand node
- Urban demand node
- Superlink (outflow from model)

(b) Links with no attached values/flows

- Flow in stream/river
- Flow in artificial channel
- Flow in pipeline
- Inflow to model (from superlink)
- Return flow with gain on link
- Outflow from model (to superlink)
- Lateral ground water flow

(c) Links with attached values/flows

- Link with attached value function
- Link with attached cost function

Possible future facilities

- Conveyance
- Pumping plant
- Surface water reservoir node
- Depletion Area (DA)

Integrated Economic-Engineering Analysis of California's Future Water Supply

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 University of California, Davis

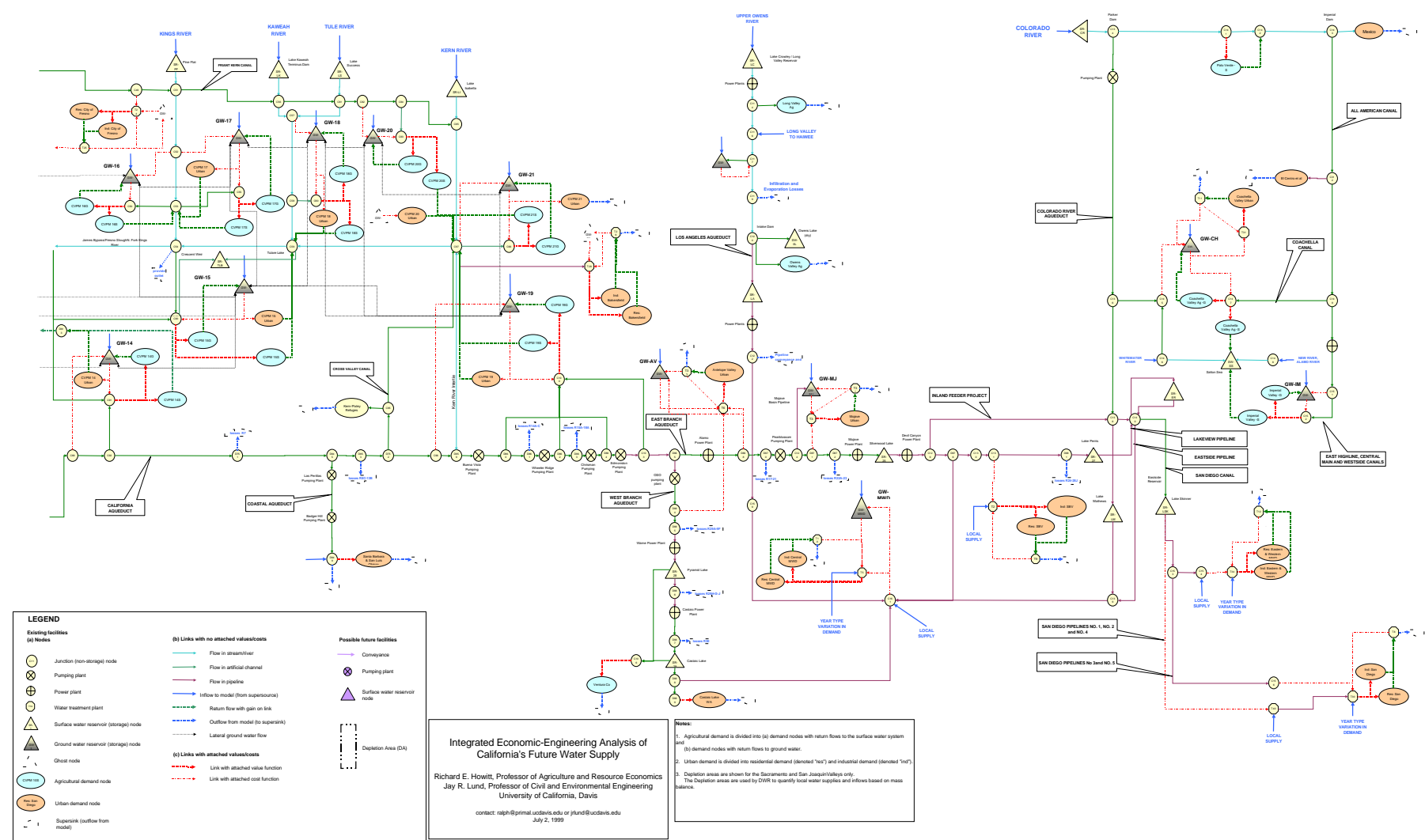
contact: ralph@primal.ucdavis.edu or jrlund@ucdavis.edu
 July 2, 1999

NOTES:

- Agricultural demand is divided into (a) demand nodes with return flows to the surface water system and (b) demand nodes with return flows to ground water.
- Urban demand is divided into residential demand (denoted "res") and industrial demand (denoted "ind").
- Depletion areas are shown for the Sacramento and San Joaquin valleys only.
- Depletion areas are used by DWR to quantify local water supplies and inflows based on mass balance.

Figure 6-4. California's Water Infrastructure Network Configuration for CALVIN (2 of 2)

DRAFT



LEGEND

Existing facilities (a) Nodes

- Junction (non-storage) node
- Pumping plant
- Power plant
- Water treatment plant
- Surface water reservoir (storage) node
- Ground water reservoir (storage) node
- Ghost node
- Agricultural demand node
- Urban demand node
- Superior (outflow from model)

(b) Links with no attached values/losses

- Flow in stream/river
- Flow in artificial channel
- Flow in pipeline
- Inflow to model (from superiors)
- Return flow with gain on link
- Outflow from model (to superiors)
- Lateral ground water flow

(c) Links with attached values/losses

- Link with attached value function
- Link with attached cost function

Possible future facilities

- Conveyance
- Pumping plant
- Surface water reservoir node
- Depletion Area (DA)

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Notes:

- Agricultural demand is divided into (a) demand nodes with return flows to the surface water system and (b) demand nodes with return flows to ground water.
- Urban demand is divided into residential demand (denoted "res") and industrial demand (denoted "ind").
- Depletion areas are shown for the Sacramento and San Joaquin Valleys only. The Depletion areas are used by DWR to quantify local water supplies and inflows based on mass balance.