## Dairies and Environmental Impacts Deanne Meyer, Ph.D. dmeyer@ucdavis.edu



#### **Overview**





## California dairies



#### Manure management





#### **Keep wet things wet**









#### **Keep wet things wet**



UCDAVIS

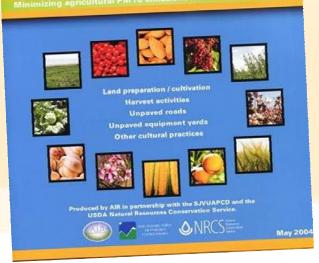




# And dry things dry and under cover





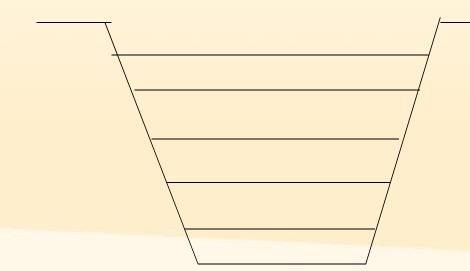






#### **Required Plans**

## Waste Management (WMP)









UCDAVIS

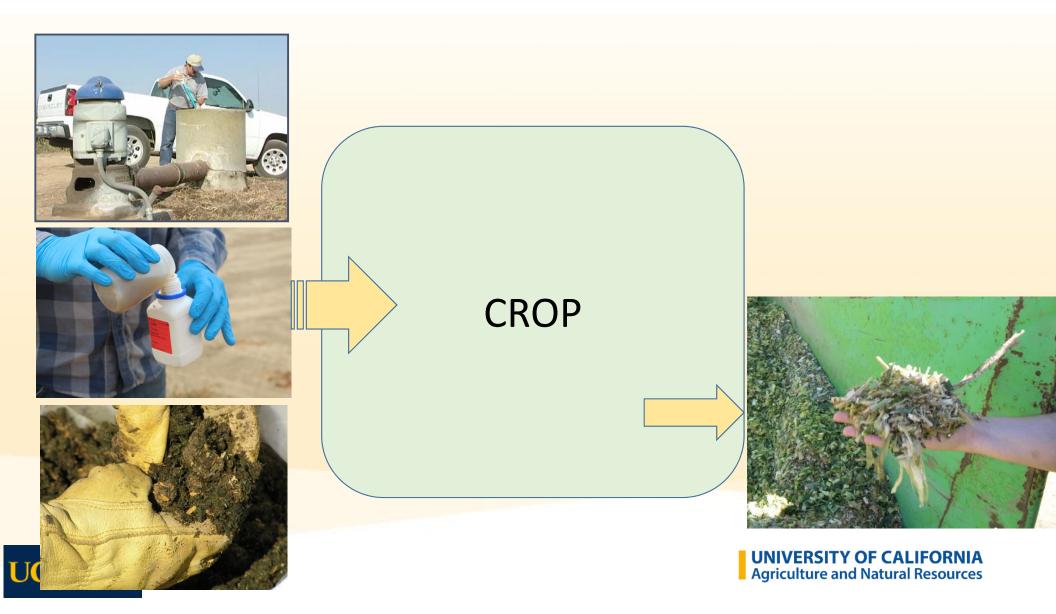
#### **Required Plans**

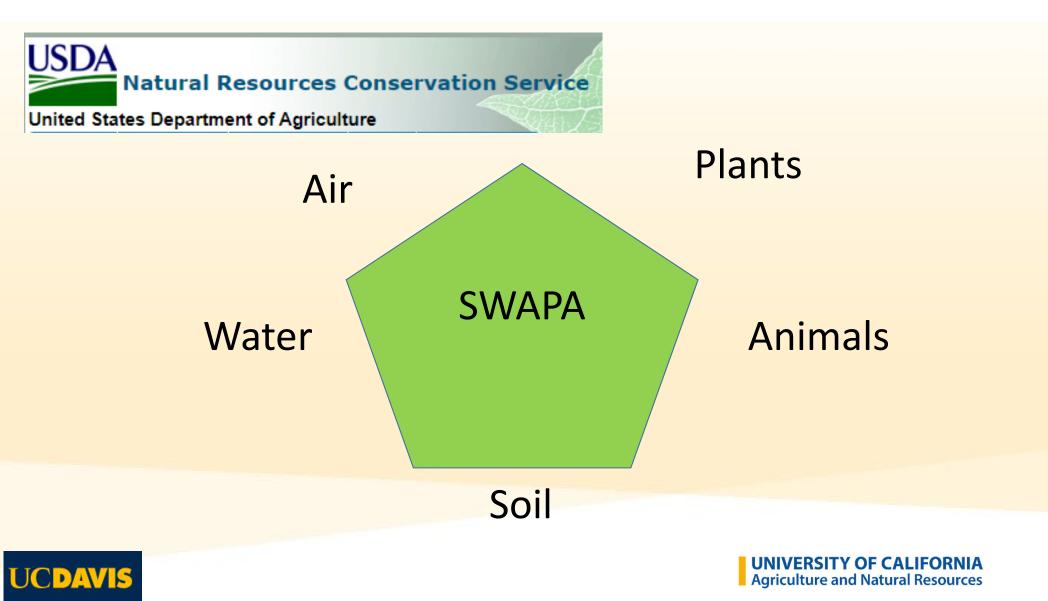
Waste Management (WMP) Nutrient Management (NMP)

## **Total N Application**

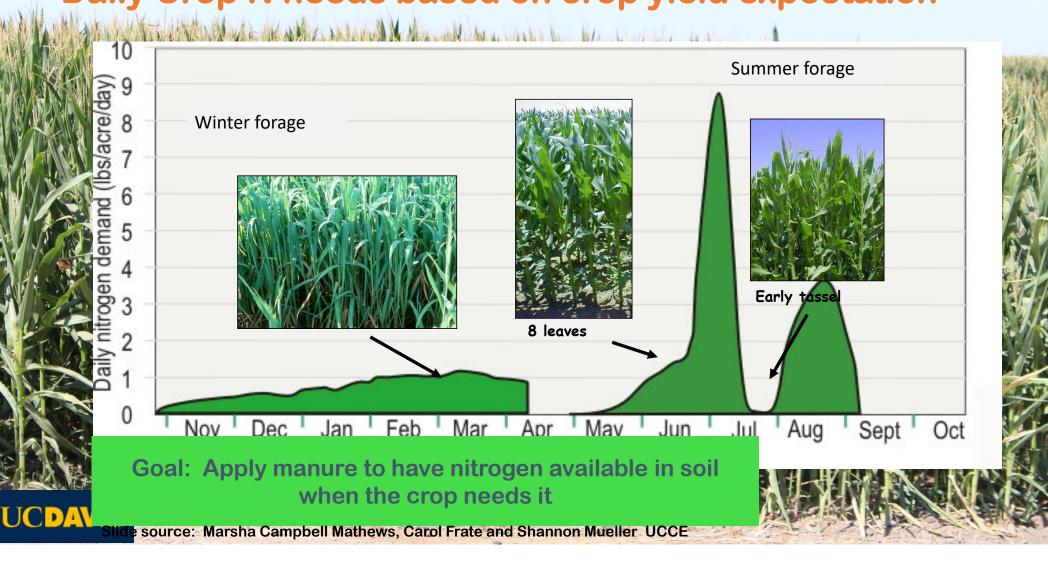
= 1.4 X Removal







#### **Daily Crop N needs based on crop yield expectation**









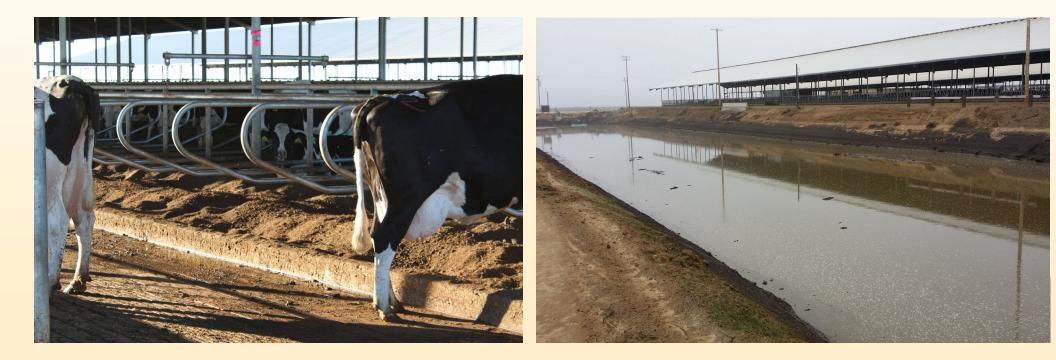












## Freestall manure collected as liquid or slurry











## Corral manure managed as dry solid







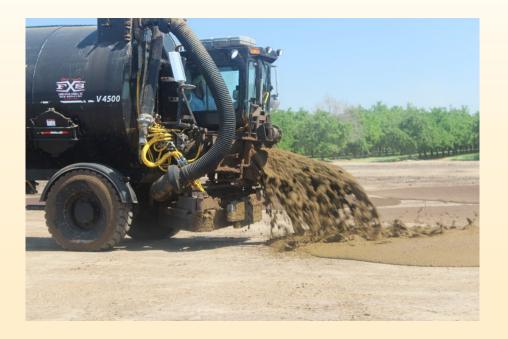
## Land apply between crops





#### Solid liquid separation removes fiber







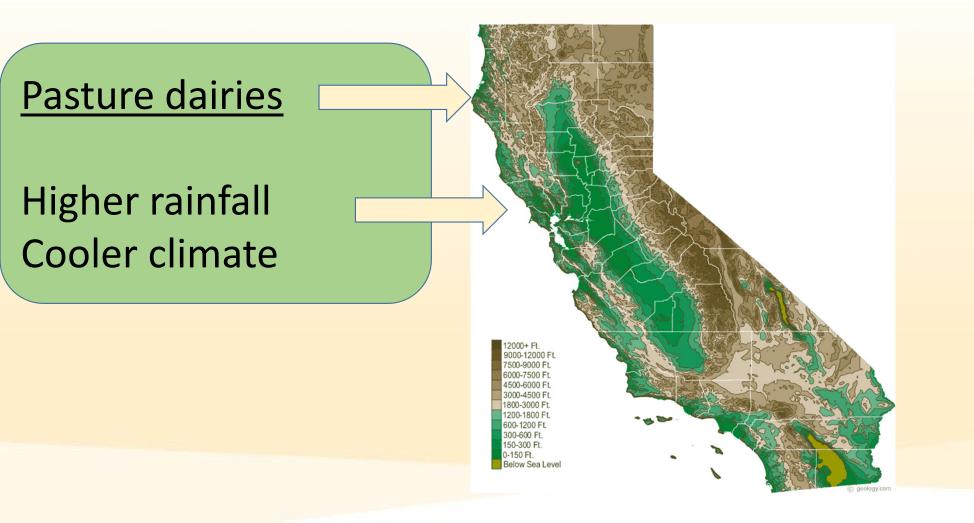
#### Vacuums





## **Compost Bedded Pack Barns**















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