



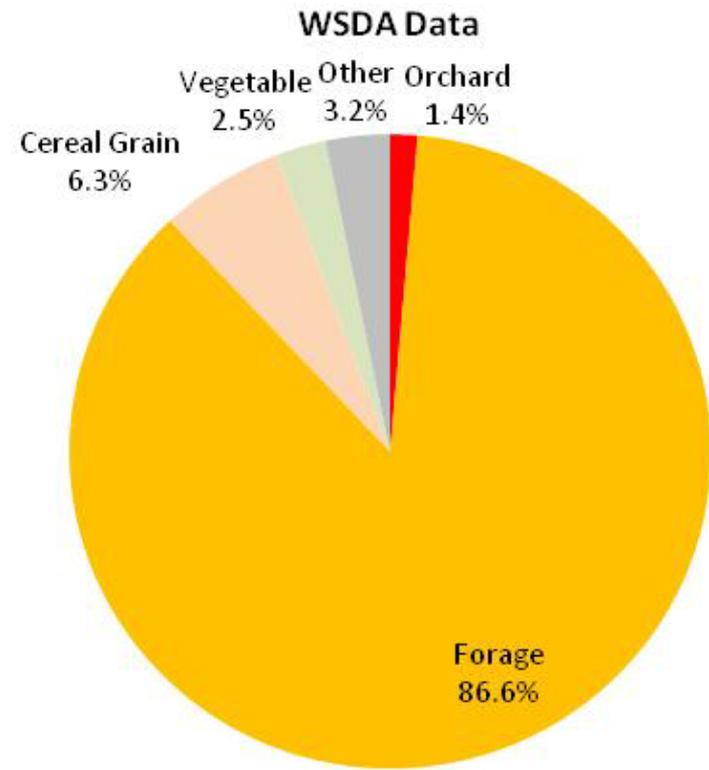
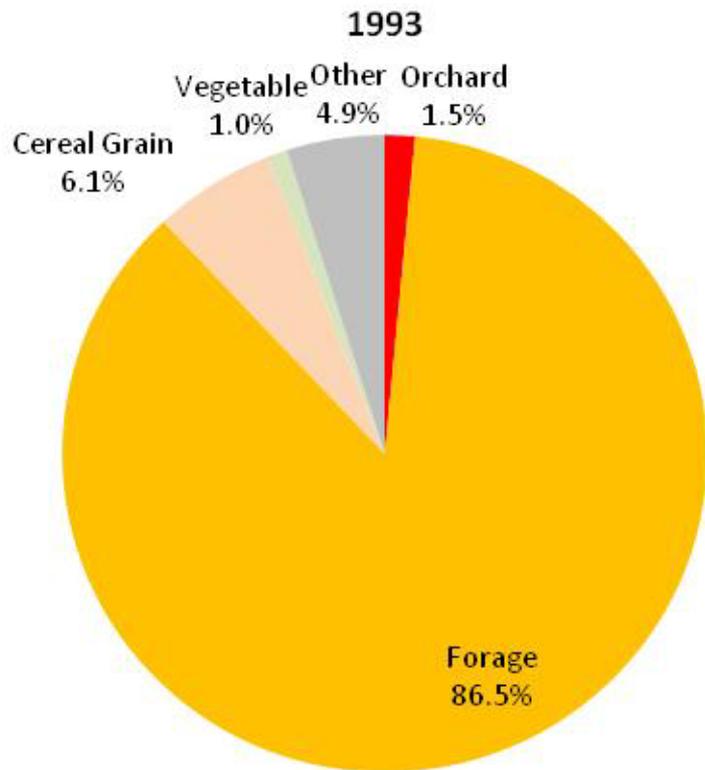
# Future Agricultural Demands

Out of Stream Needs

# Factors in Future Demands

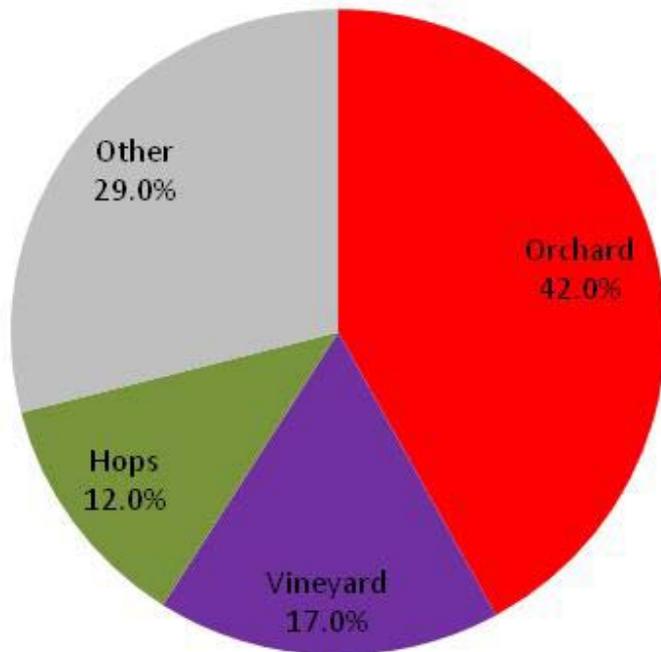
- Water conservation projects;
- Conversion of lands;
- Climate change;
- Cropping Patterns;
- Changes in acreage

# Cropping Patterns - KRD

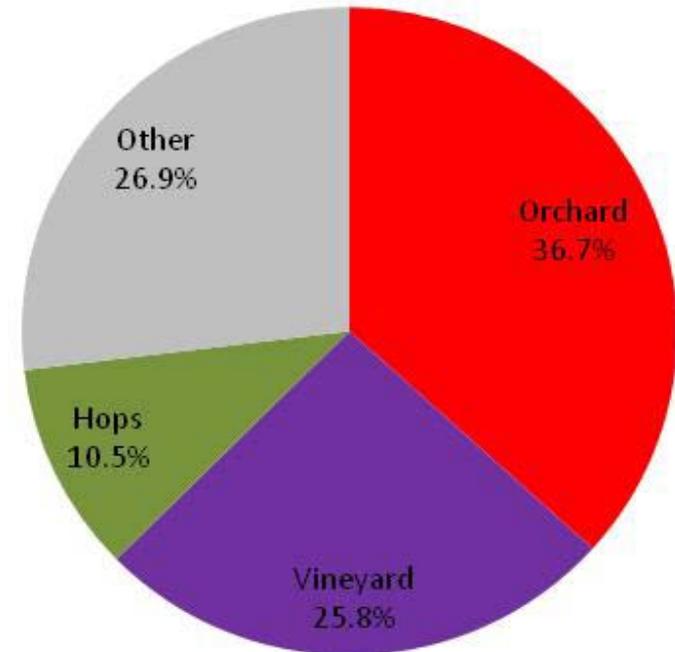


# Cropping Patterns – Roza I.D.

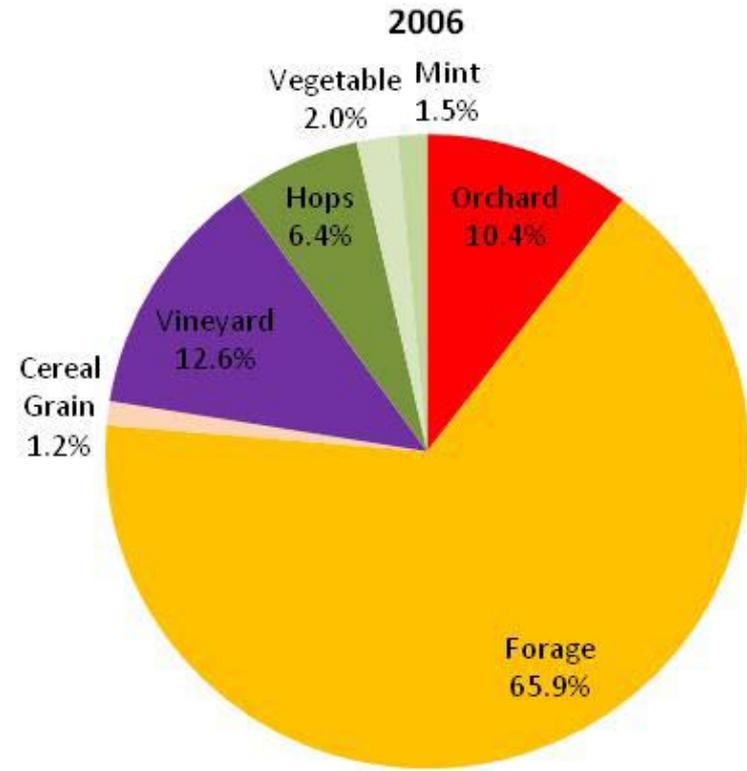
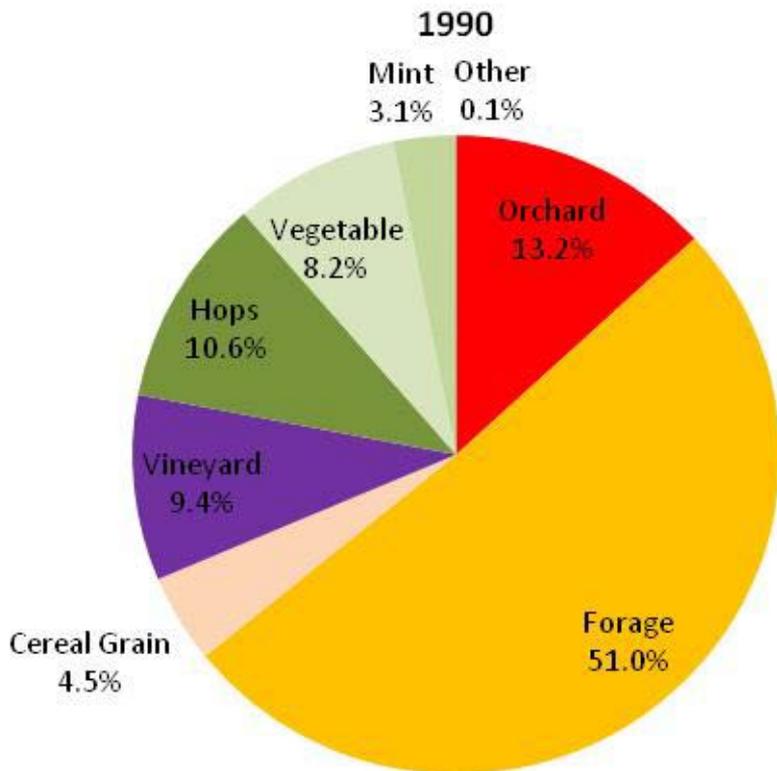
1985-1990



2010

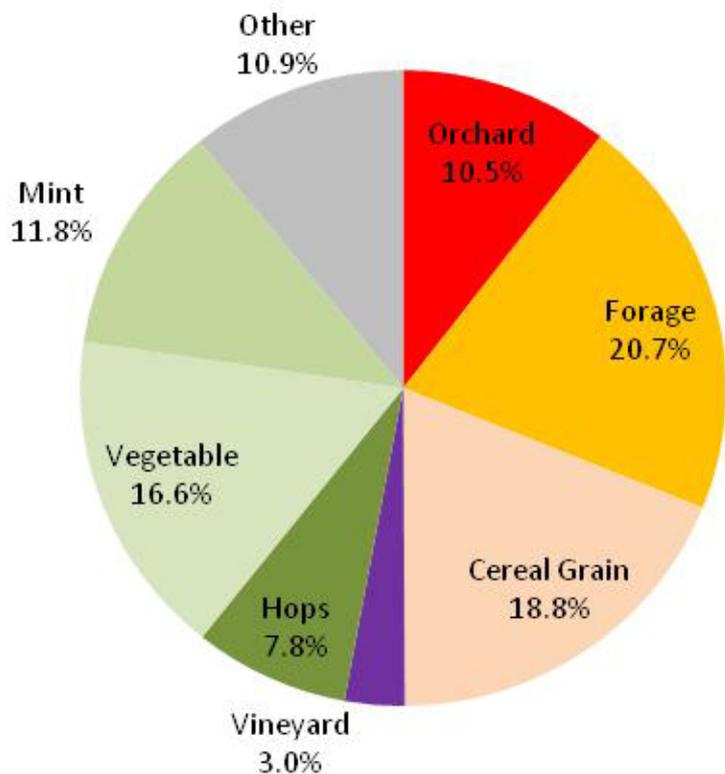


# Cropping Patterns – Sunnyside Division

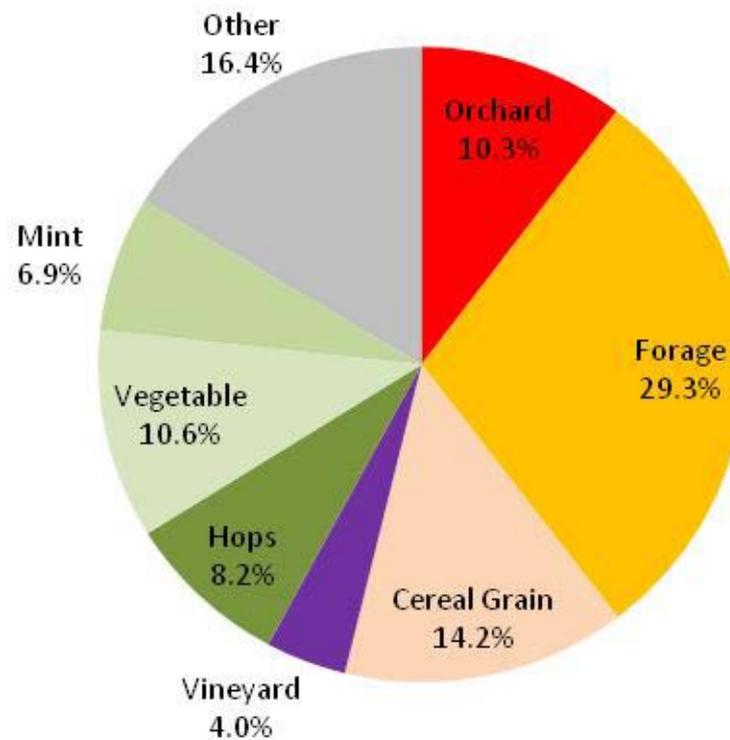


# Cropping Patterns – WIP

1990

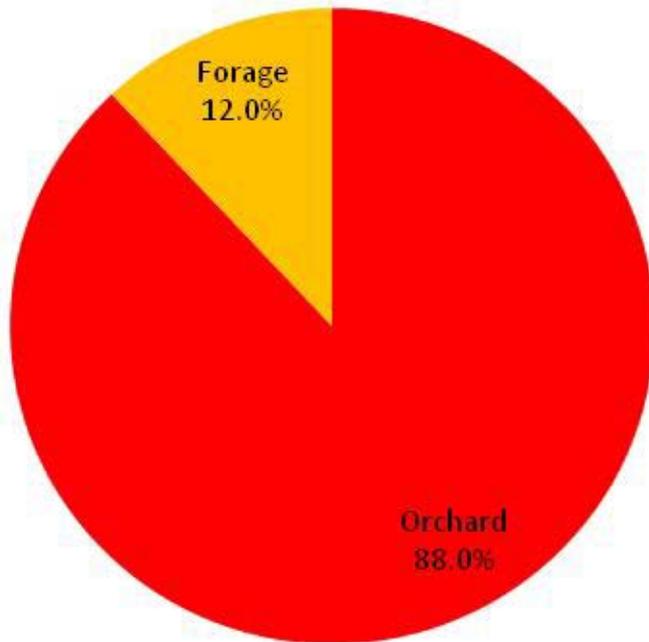


2006

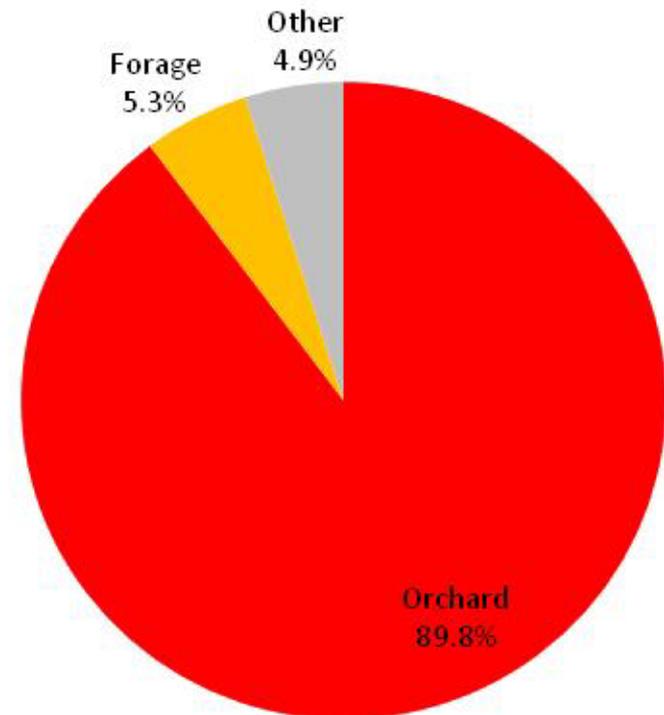


# Cropping Patterns – Yakima-Tieton

1994

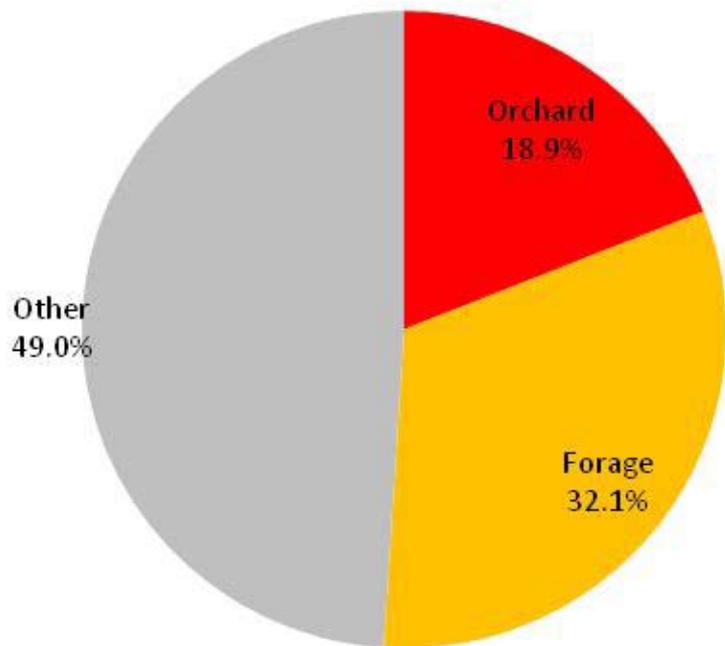


WSDA Data

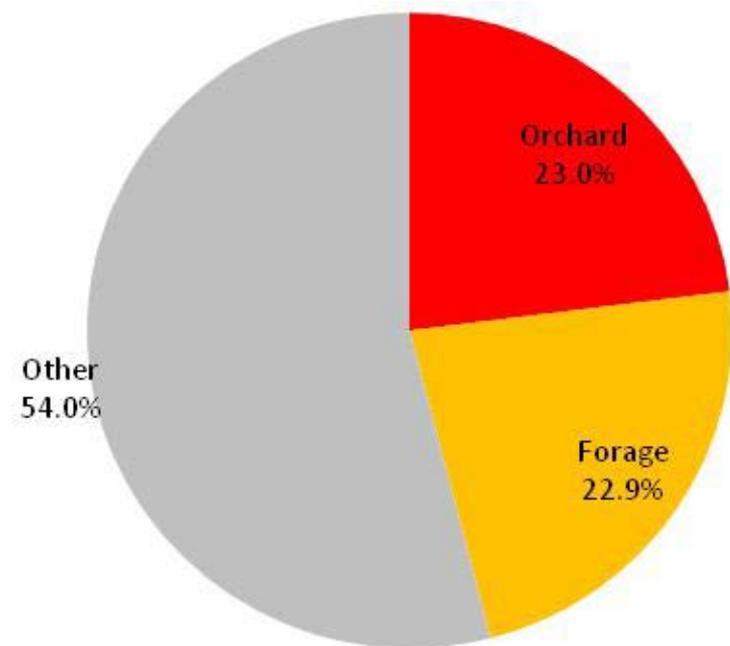


# Cropping Patterns – Kennewick

1992



WSDA Data



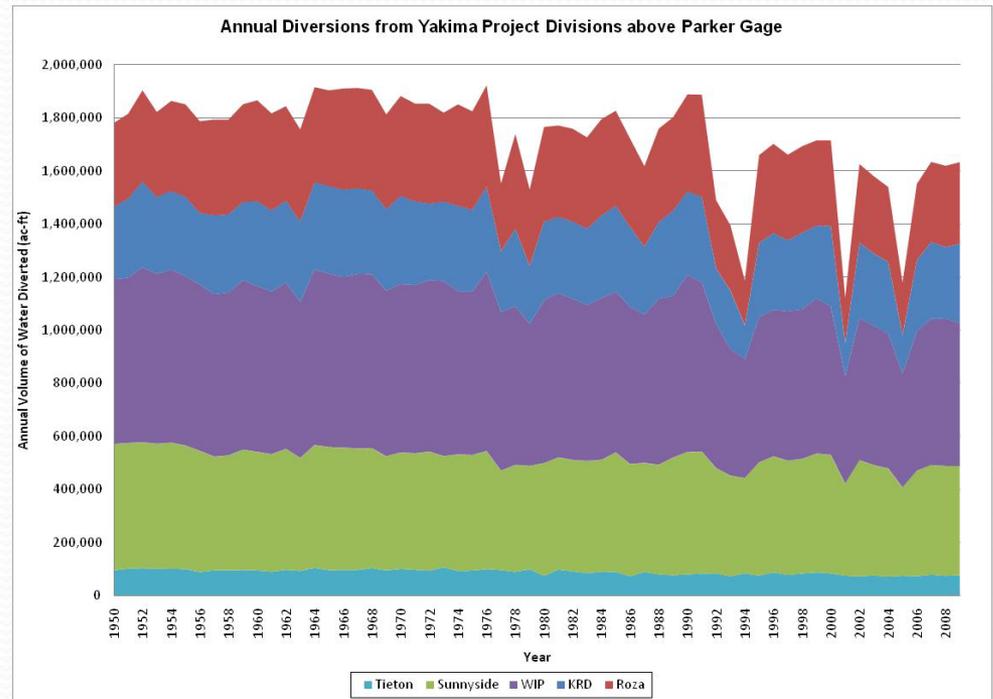
# Past and Present CIRs (AF/ac)

	KRD	Roza	WIP	Sunnyside	Tieton	Kennewick
Average CIR (Current)	2.50	2.97	2.78	2.72	2.61	2.96
Average CIR (Past)	2.72	3.11	2.73	2.69	2.58	3.50
Year(s) of Past Data	1993	1985-1990	1990	1990	1994	1992

Overall, CIRs have reduced slightly due to conversion of orchards to vineyards, reduced acreage in hay, other factors

# Water Conservation

- Irrigation System Improvements are on-going through YRBWEP, other funding agencies or groups and District funding
- On-farm irrigation system improvements also on-going through public and private funding
- Water conservation one of the reasons diversions have decreased over past 5 decades.



# On-farm Water Conservation Is Ongoing

## WSDA Data

	KRD	Roza	WIP	Sunnyside	Tieton	Kennewick
Rill	67.0%	7.1%	39.3%	33.1%	1.2%	2.1%
Sprinkler	2.3%	56.8%	14.6%	31.1%	91.8%	31.6%
Drip	0.5%	22.8%	13.9%	10.4%	2.1%	24.2%
Wheel Line	8.2%	4.8%	18.8%	12.7%	2.7%	3.7%
Center Pivot	10.5%	6.0%	10.9%	10.7%	0.0%	32.6%
Other	11.6%	2.4%	2.4%	2.0%	2.2%	5.8%

## District Survey Data

	Roza	Sunnyside
Rill	4.1%	32.0%
Sprinkler	69.7%	65.0%
Drip	26.2%	3.0%

Outside of Yakima Project, 75% is sprinkler or drip irrigated. Most all of the rill irrigated acreage is in Kittitas County

# Idle Acreage

- Most all of the idle acreage is in WIP
  - Approx 28,000 acres idle
  - Approx 16,400 acres can be put into production with improvements to WIP system
  - Additional water need would be approx 64,000 AF