

# Economic Impact of the Irrigation Equipment and Services Industry

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# Scope of Work

Estimate the dollar magnitude of the irrigation equipment and services industry

- Independent update of 2010 study
- What impacts are being measured?
  - Direct impacts - expenditures for irrigation equipment and services at the national level
  - Indirect and induced impacts of expenditures (backward linkages to suppliers and households), the multiplier impacts

# Why know the size of the industry?

Measure of growth over time

Measure of political clout

- More powerful lobby for industry's interests at national and regional levels

Manufacturer and supplier benchmarking

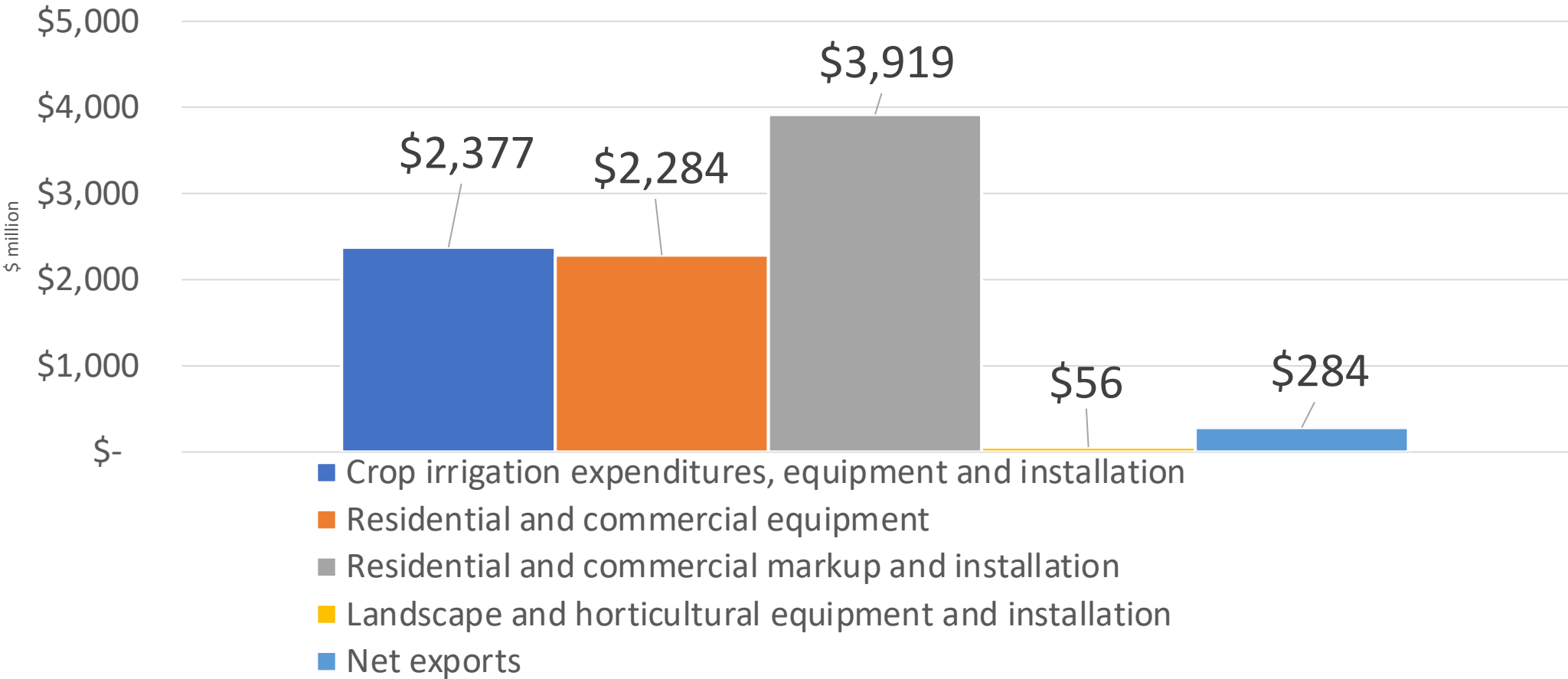
Information for investors and creditors

- Factors driving the industry and their relative influence
- Market share
- Investment risk





# Summary of direct expenditures, 2020 (million)



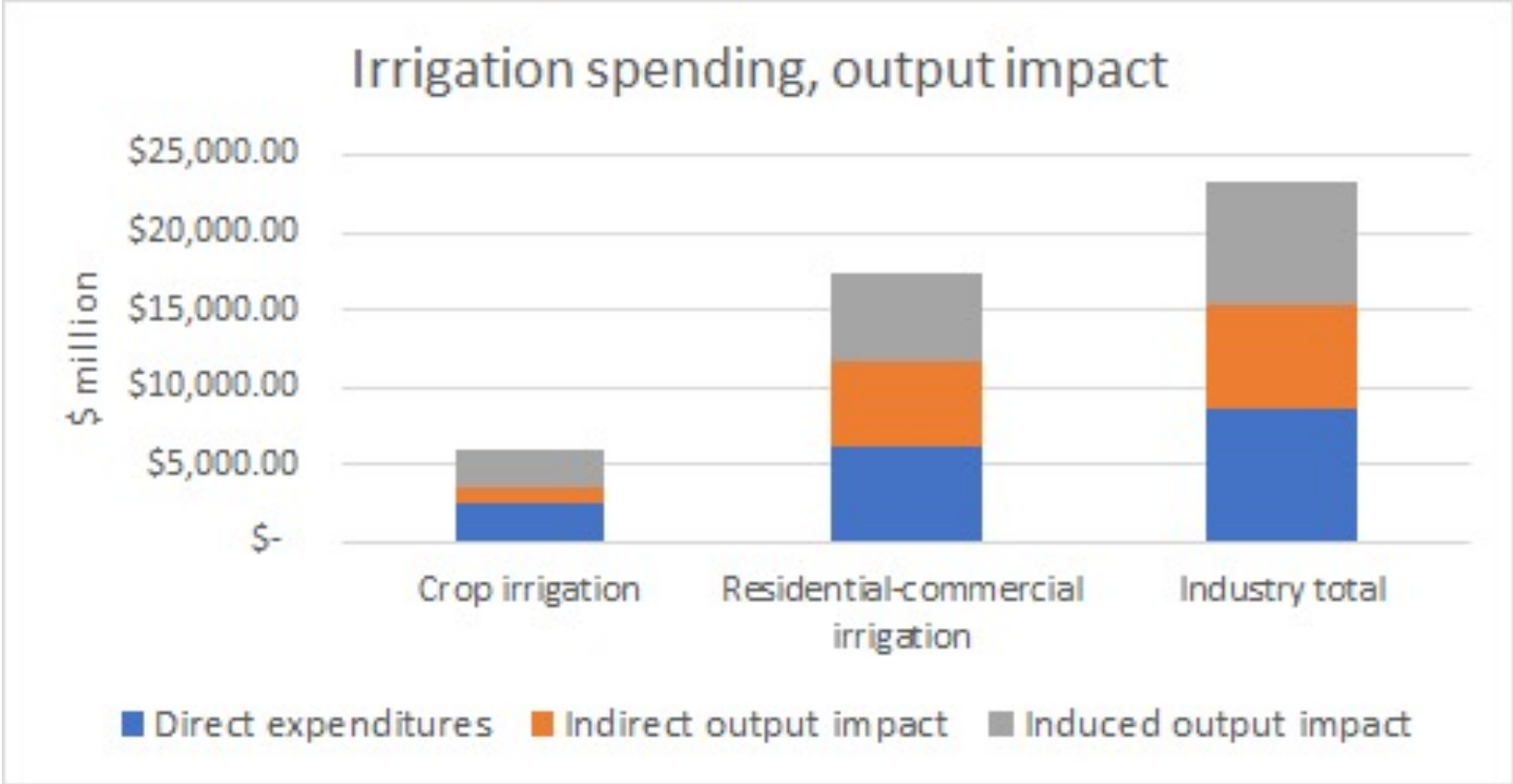
# Summary of direct expenditures

	2010 estimate	2020 estimate	growth
Crop irrigation	\$ 1,324	\$ 2,377	6.03%
Landscape and hort.crop irrigation	NA	\$ 56	
Residential	\$ 2,819	\$ 3,315	1.63%
Commercial	\$ 1,344	\$ 2,236	5.22%
Golf	\$ 1,604	\$ 653	-8.59%
Net exports	NA	\$ 284	
	\$ 7,091	\$ 8,920	2.32%



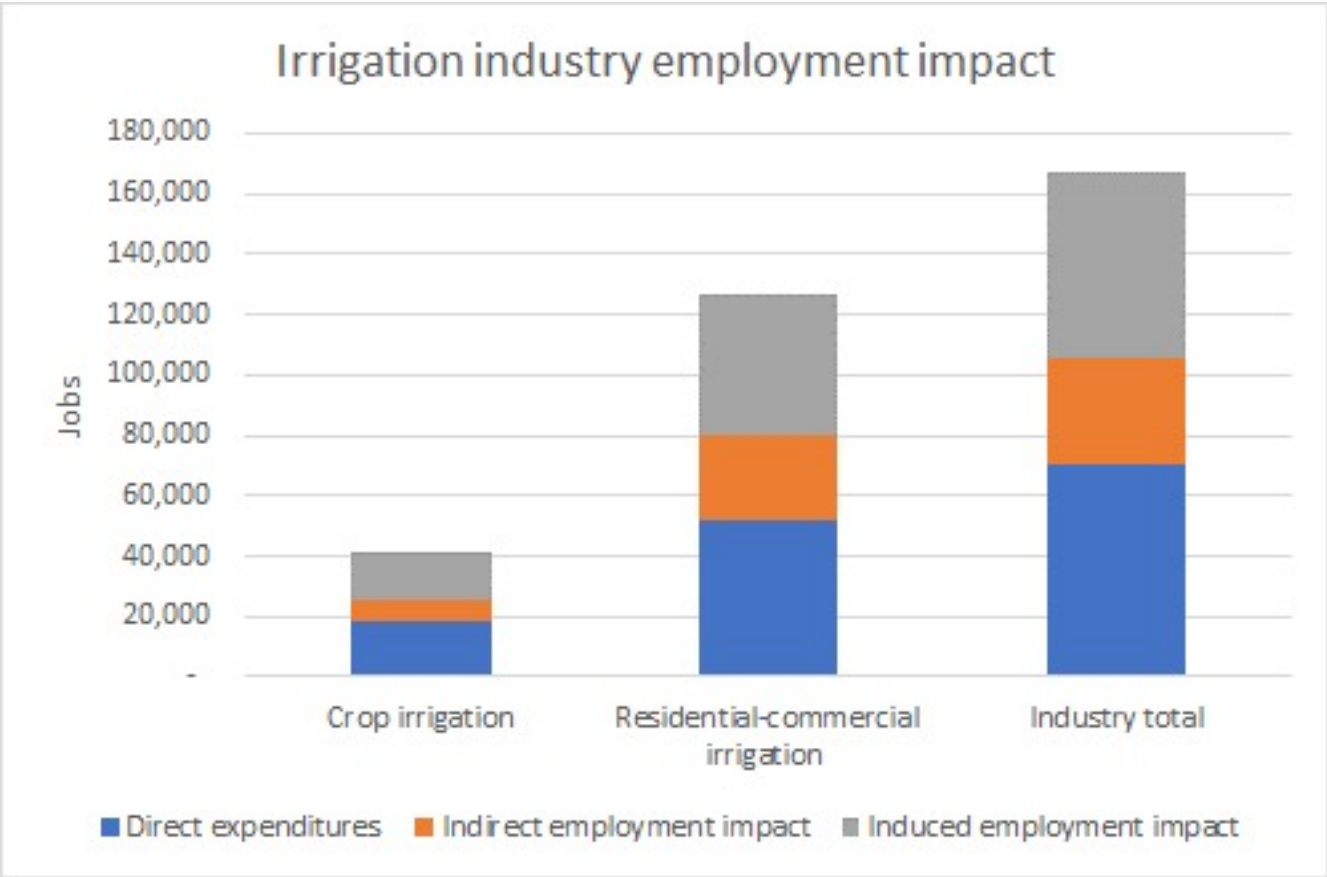


# Impact of irrigation spending on GDP





# Impact of irrigation spending of employment





# Summary of total impact

	2010 estimate		2020 estimate	
	Direct impact	Total impact	Direct impact	Total impact
Output (million)	\$ 7,091	\$ 19,205	\$ 8,920	\$ 23,262
Employment (jobs)	66,000	149,900	70,323	167,578





# Conclusions and summary



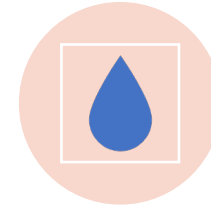
Industry has grown at an annual rate of about 2.3%



Irrigation expenditures driven by variables out of the industry's control – crop prices and new construction



Current estimates appear to agree with empirical data (crop) and industry's perceptions



No evidence of water conservation initiatives reducing demand



Pandemics are bad, but provide a temporary boost to residential expenditures



# Lessons learned

Many economic explanatory variables tend to get “washed out” in a national analysis

- Regionalization of the model would improve explanatory power
- Ability to incorporate irrigator behavior

Geospatial tools exist to estimate irrigated turf areas

There is no substitute for empirical data

- Anecdotal evidence also has value

Moving forward, a process for collecting industry data while maintaining some anonymity is essential





Questions?

