

Using a BMP Auction for Targeting in Kansas

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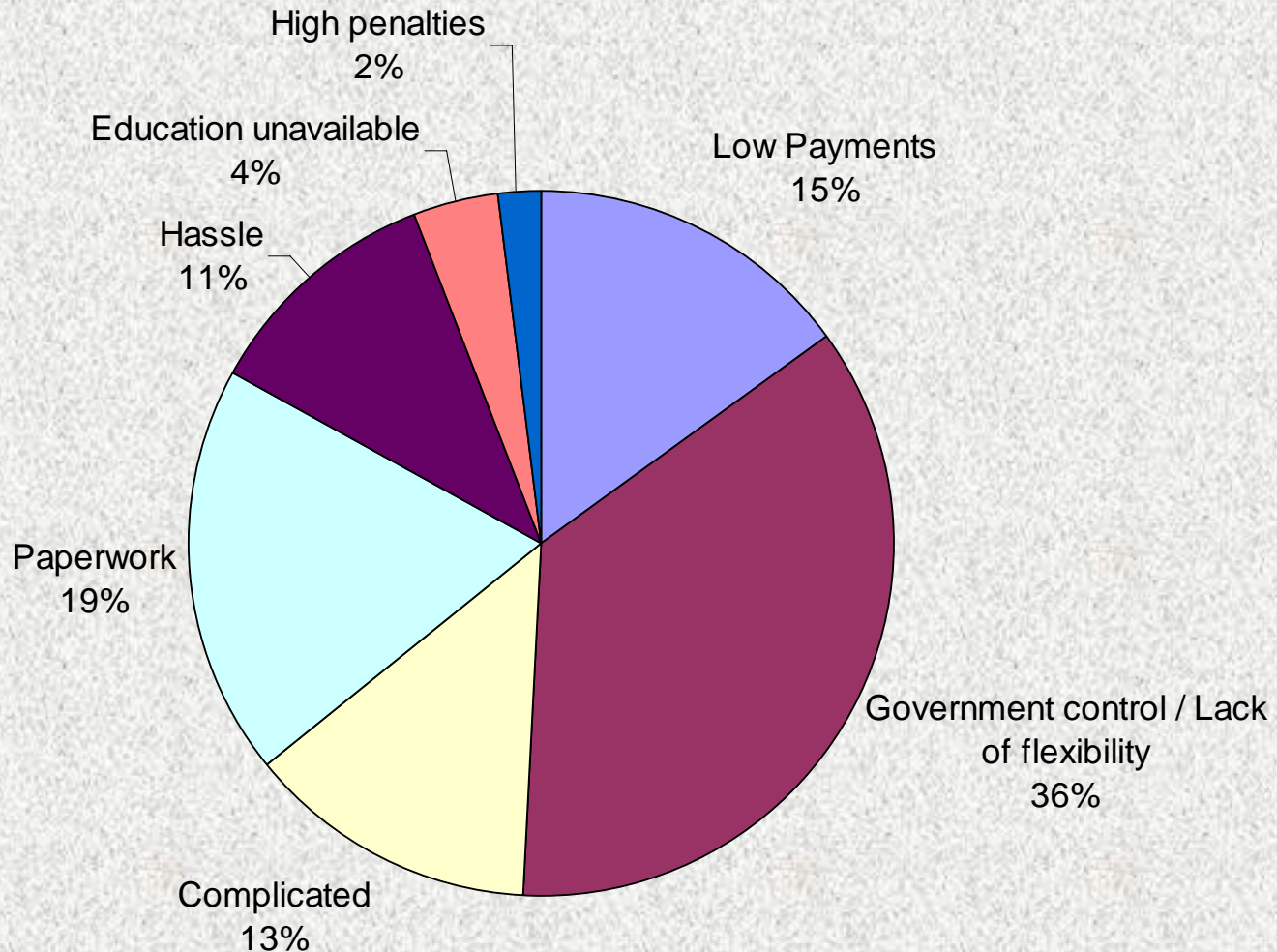
Issue

- Since 1972 Clean Water Act – increased attention to nonpoint source pollution (sediment, nutrients, pesticides).
- Many years of effort and \$\$ spent on BMPs aimed at reducing NPS pollution.
- Challenges remain
 - In Kansas (KDHE 2002), 76% of stream miles and 77% of lake acres were impaired for one or more uses.
 - Traditional technical assistance/incentive-based programs unlikely to meet TMDL goals.

Issue

- Many cost-share & incentive programs in place.
- Many producers still choose not to participate and/or adopt BMPs.
- Why is this the case?
- How can we increase BMP adoption rates?

Why do some producers choose not to participate in conservation programs?



Summary of Findings

- No simple answer to ↑BMP adoption & participation in conservation programs.
- Many producers say that participation is limited because of:
 - Excessive paperwork, program complexity, “hassle” of living up to program obligations.
 - Any innovations to simplify or reduce producers’ time commitment would be a worthwhile investment.

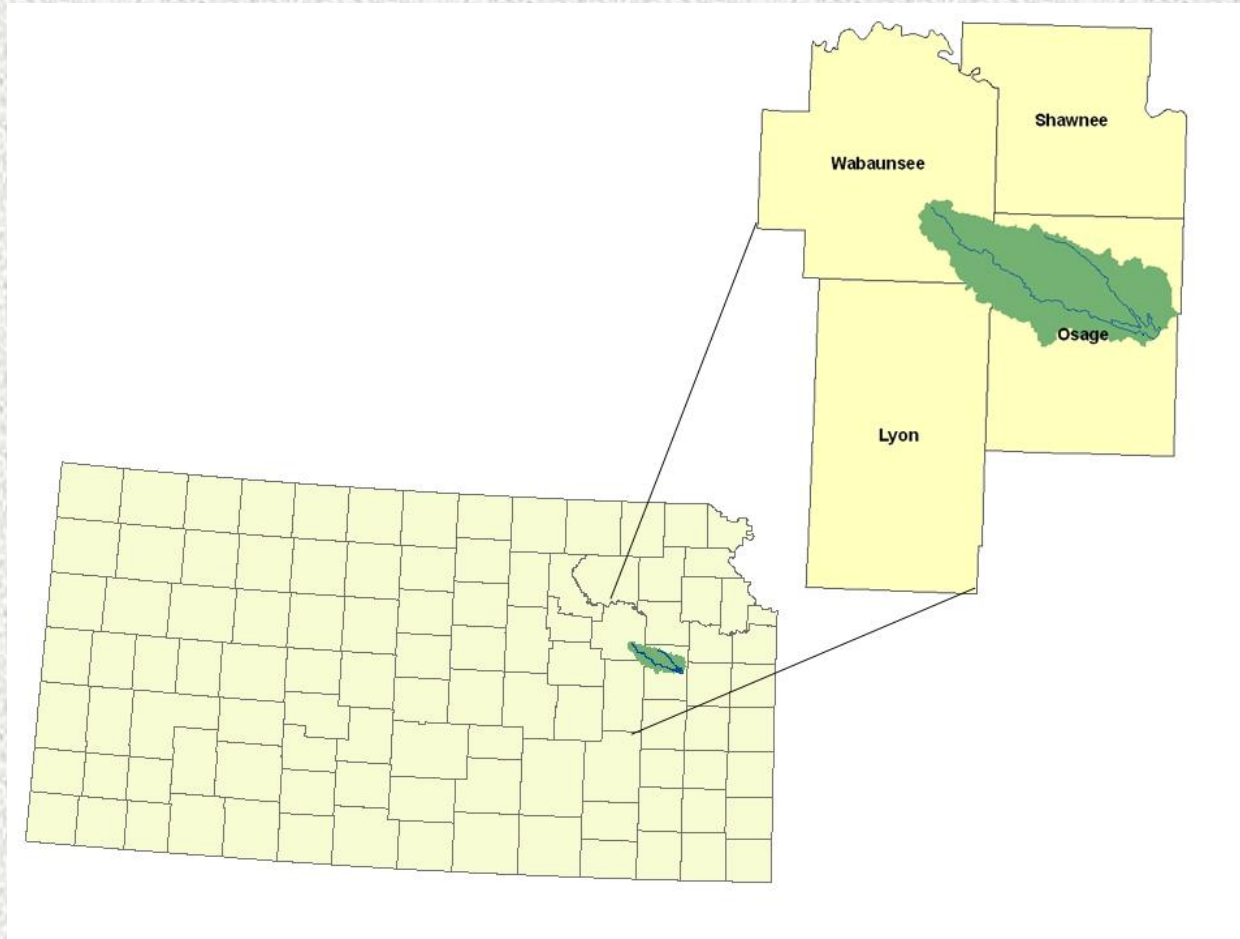
Market-based Approaches

- Much interest in market-based approach.
- NRCS Strategic Plan (2005-2010) lists “Market-Based Approaches” as one of three overarching strategies.
- Success in air quality trading.
- Concepts now being applied to water quality trading.
- One hybrid-type approach to be used in Kansas: BMP Auction.

Possible Alternative – BMP Auctions

- Producers submit bids to supply the watershed with WQ improvements.
- Bids are ranked by amount of WQ improvements generated per dollar.
- Producer who offers WQ improvements at lowest price is contracted with first.
- Process repeated until a predetermined point is reached.
- BMP auctions identify and purchase the most cost-effective WQ improvements for a specified budget.

Pomona Lake BMP Auction



TMDLs for: Eutrophication, Silt, Dissolved Oxygen

BMP Auction - *mechanics*

Stakeholder's Goal: reduce sedimentation in Pomona Lake

<input checked="" type="checkbox"/>	Best Management Practices — <i>see back for definitions</i>	Erosion Reduction Efficiency	Treated Field Acres	Total Bid Price (dollars)
—	Establish riparian vegetative buffer (check width): ___ less than 30' wide ___ 30' to 60' wide ___ greater than 60' wide	25% 50% 75%	_____	_____
—	No-tillage (check option): ___ Option #1 ___ Option #2	40% 75%	_____	_____
—	Farm on the contour	35%	_____	_____
—	Establish contour grass strips	50%	_____	_____
—	Re-shape existing terraces	25%	_____	_____
—	Establish terraces	30%	_____	_____
—	Establish permanent vegetation on entire field	95%	_____	_____
—	Establish grassed waterways	50%	_____	_____
—	Alter crop rotation away from continuous soybeans	25%	_____	_____
—	Other (explain):	TBD	_____	_____

Auction Summary

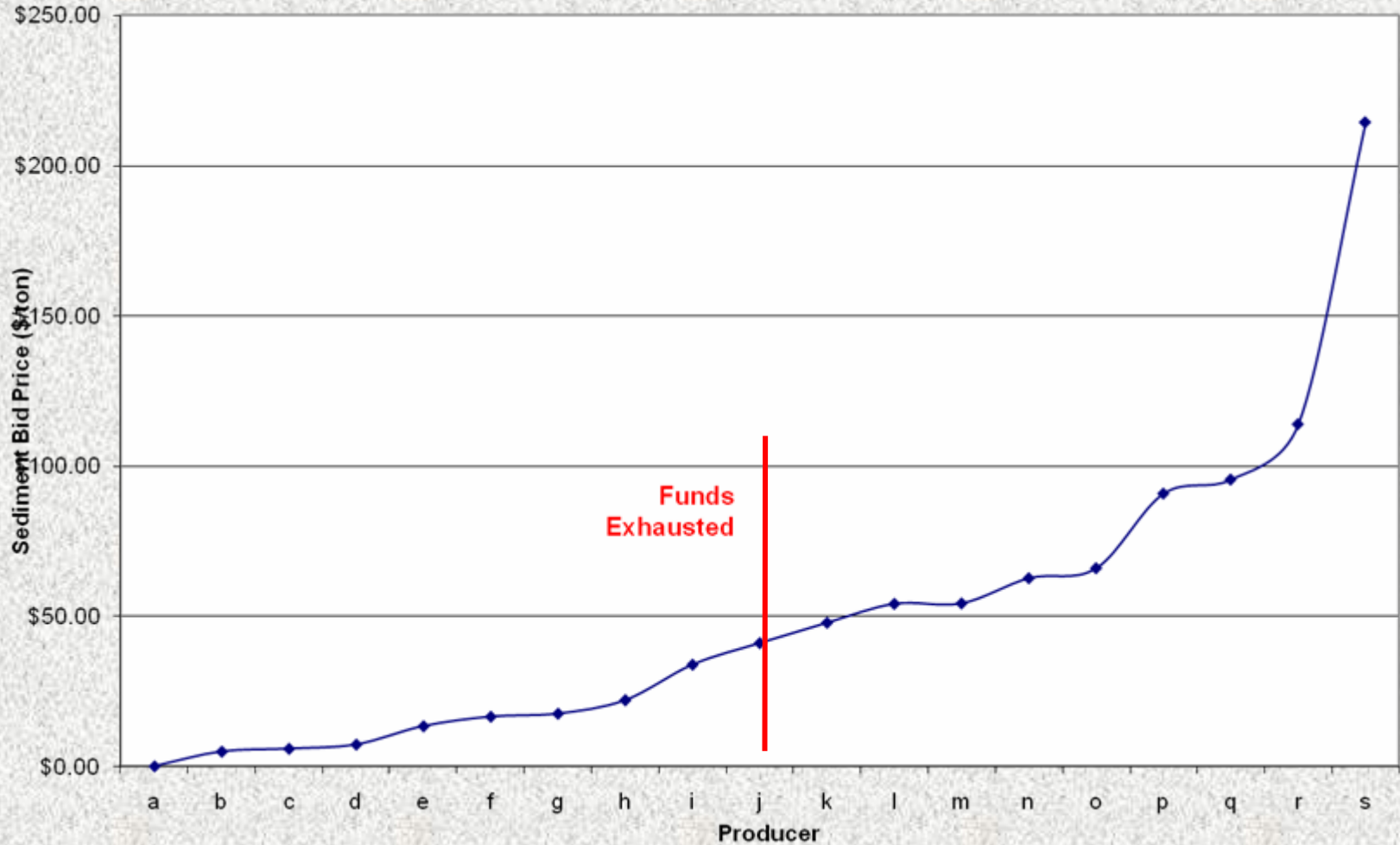
Auction Round	Bids	Total Dollars	Funded Dollars
1 (2007)	24	\$19,062	\$19,062
2 (Fall 2008)	22	\$39,000	\$17,250
3 (Late 2008)	17	\$41,954	\$26,254
Total	63	\$100,016	\$62,566

Auction Summary, Cont.

Auction Round	Total Tons Reduced	Efficiency	Average \$/Ton (10 years)
1	938	75%	\$2.03
2	1,439	34%	\$1.80
3	911	61%	\$2.88
Total	3,288		

Round Two Bids

Variation in Producer Bid Price



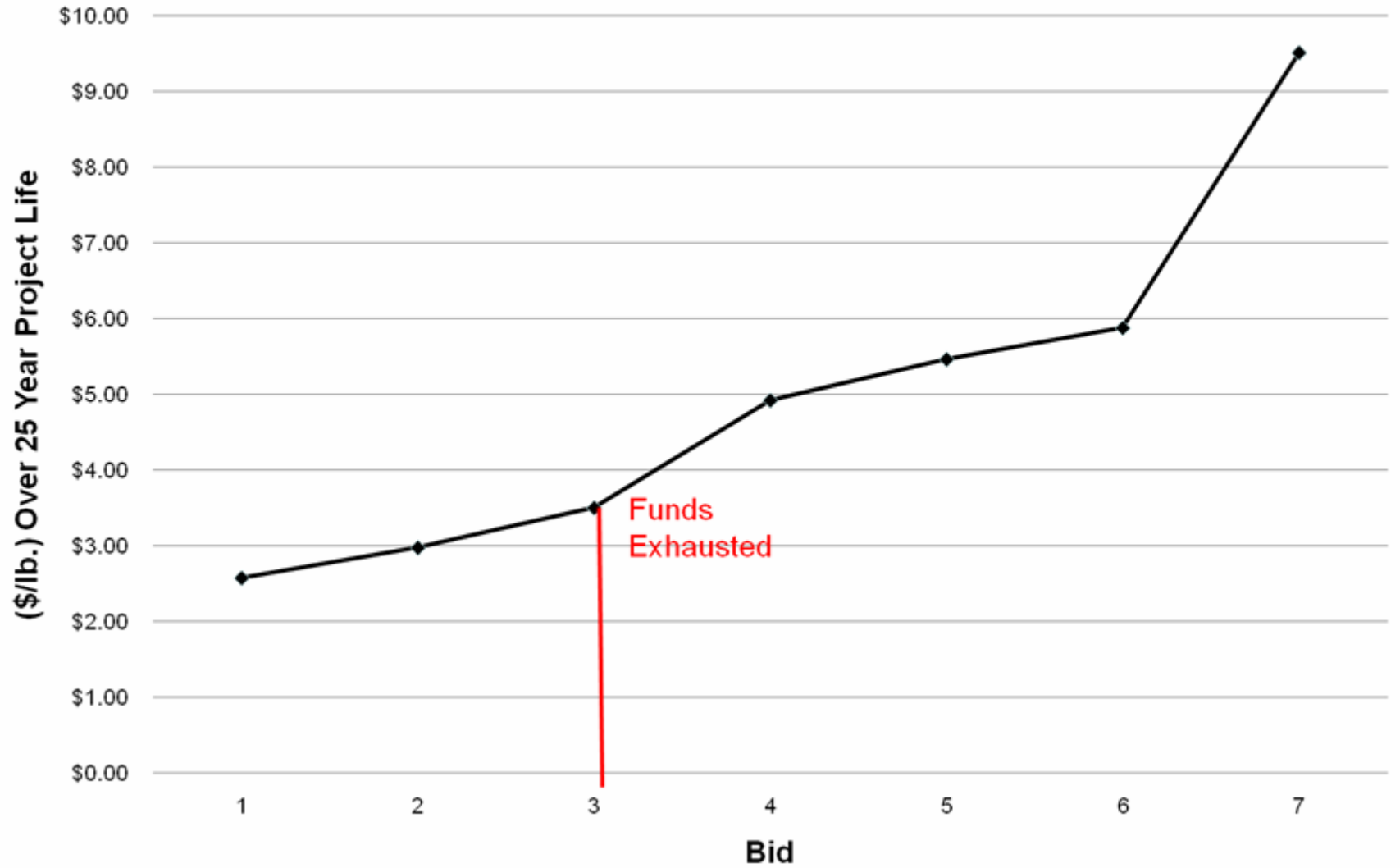
Marais des Cygnes Livestock Auction

- Conducted April-June, 2009
- Bi-State Targeted Watershed Grant
- Simultaneous auctions in Kansas in Missouri.
- \$70,000 split evenly between states.

Livestock Auction Results

- Seven bids ranked on Kansas side for a total of \$42,675
- Two bids ranked on Missouri side for a total of \$45,156
- 578 Cattle, 1,458 acres of pasture, 2 feedlots

Marais des Cygnes Livestock Auction 2009, Cost Effectiveness of Phosphorous Reduction, Kansas



BMP Auction - *benefits*

- Several benefits to coupling a BMP Auction with flexible implementation funding:
 - Funds can be targeted to highest impact investments and exceed limits of existing programs.
 - Producers offered flexibility of choosing alternative BMPs that work best for their operation and name their price.
 - Provides valuable insights into the incentive levels required to adopt BMPs.
 - Guide future policies and investments.

Pomona BMP Auction - Challenges

- Keeping it simple enough to be easily understood, but complex enough to be effective, we are all learning!!
 - Many meetings with stakeholder group, NRCS, CD, Watershed Specialist, Extension Agent discussing details.
- Marketing
 - Multiple producer meetings, mailings, farm visits, phone calls, and radio interviews to spread the word.

Questions??

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