

BPA Irrigated Agriculture Energy Conservation Pilot Program Report

By PAUL SUMNER
BACKGROUND

From the program work statement, we find that the pilot program was designed to be "the first stage in a multi-stage effort to implement a comprehensive and intensive energy conserva-

tion program for irrigated agriculture."

The primary purpose of the first stage is to acquire the experience and data before proceeding to the second stage which will provide financial incentives for accomplishing energy con-

servation measures.

From a BPA perspective, this was one of many programs considered while the forecasts still indicated shortfalls in capacity by the mid to late 1980s.

Under their conservation programs, BPA buys kilowatt-hours saved as a result of improving energy efficiencies. The justification being that conservation kilowatt-hours are cheaper to buy than the cost of new generation.

CBEC'S PARTICIPATION

As the program is a pilot, very specific limitations were placed upon us through our contract with BPA.

We were allowed \$7,000.00 to conduct our inspections. These inspections were not to exceed \$250 per system, \$300 if a pump test was completed. The maximum payment would include a system inspection and two pump tests at \$350.

Quotes were requested from two organizations providing these services. Agri-Water Control was chosen to do the inspection work for us. It was felt that their experience and non-intrusive type of electronic flow equipment made them the better choice.

Fifteen irrigators signed up for the system inspections. For several different reasons, five canceled, leaving us with ten systems to analyze.

Of the ten systems we looked at, we were unable to do system audits on two. For these two, we provided pump tests only.

Copies of the analyses and pump tests were provided to the SCS office.

A survey was sent out in January 1984 to determine how nearly the program approximated the irrigators' needs and what suggestions they would have for improvement.

THE FUTURE

In the short time between the announcement of the program and the present, a number of changes have occurred.

The BPA buy-back per estimated kilowatt-hours saved was dramatically increased; however, the incentive dollar amount

per system BPA was willing to guarantee to be available in 1984 was established at a relatively low level (\$1,525.00).

Beyond 1984, it is anyone's guess as to the direction BPA will follow with the irrigation program.

CONCLUSION

The efficiency testing under this program is one dimensional and by itself somewhat limited in value.

It is realized that there are countless considerations - soils

(Continued on page 3)

Reflections on the year that was — 1983

Accomplished last year

July 1, 1982 - June 30, 1983

+ Jordan Canyon Special Project continued development during this period of time. A special field trial was initiated in the watershed to investigate no-till fallow. Several case studies are also being evaluated for stubble mulch effectiveness.

+ Long term agreements (LTA) have now grown to 21, an increase of four during the year.

+ Conservation tillage has continued to be an on-going development. The ASCS cost-share program has contributed to this increase.

+ No-till has started to develop as a new conservation system in the County. Nearly 1600 acres of no-till annual grain was planted last year.

+ Completed the no-till demonstration as funded through the State Soil and Water Conservation Commission.

+ Supported the National and Oregon Association of Conservation Districts.

+ Assisted the FFA soil judging contest and Outdoor Classroom Conservation Education Program. Distributed "Conserving Soil" booklet to all the schools in Morrow County.

+ Continued education efforts for the Morrow County Weed District. A brochure was developed and distributed during this period of time.

OTHER ACCOMPLISHMENTS

	No.	Amount
Technical Assistance	830	_____
Individuals applying conservation practices	78	_____
Resource system plans	47	35,224 acres
Terrace Systems	23	273,988 feet
No-till systems	16	1,591 acres
Ponds	8	_____
Grass Seeding		106 acres
Brush Spraying		275 acres
Pipeline		5,020 feet

Projections for a prosperous 1984

This year's objectives

ANNUAL WORK PLAN

July 1, 1983 - June 30, 1984

CROPLAND


1. Continue to promote the annual crop no-till program on the shallow soils (Waha-Morrow-Valby) of Morrow County.
2. continue to develop management plan of operations for all applicants of reduce-till and no-till.
3. Evaluate the effectiveness of a wheat-summer fallow no-till program (Swanson).
4. Continue to emphasize the mini-LTA program.

RANGE

1. Continuation of comparison of gains between crop residue only winter feed and alfalfa hay plus supplements on steers.
2. Continuing evaluation of introduced grasses (FFA seedings) for range planting in Morrow County.
3. Continue identification of noxious range weeds and monitoring their spread.
4. Evaluation of spring grass seedings with rangeland drill following spraying of Roundup.
5. Keeping abreast of OSU elk study on winter range.
6. Promote continued use of rangeland drill for grass seedings. Promote seedings on abandoned cropland.

WEED CONTROL

1. Develop budget proposal for a weed supervisor.
2. Support a state weed publication.
3. Continue to promote a more cooperative effort from land-owners for control of noxious weeds.



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