



Master Irrigator Program

Sponsored by NPGCD and NRCS

Presented by

Dr. Steve Amosson,

Professor Emeritus

Texas A&M AgriLife Extension Service



Why Was the Master Irrigator Program Developed?

Conduct an intensive training for irrigators that provides them with information on the best and latest water conservation tools & strategies.

Conserve water

Get the most out of the water applied

What is the Master Irrigator Program?

- Four days of training on the latest water management techniques and conservation strategies that maximize irrigator's net returns per acre-inch applied.
- Training agenda is determined by an Advisory group of producers, Industry and other experts with the objective that all topics are relevant to the area.
- All topics are taught at an applied level by the best instructors available.

The Master Irrigator Program

The Beginning

- NPGCD staff developed a project proposal submitted to NRCS incorporating the project objectives with the educational component patterned after the concepts used in the national award winning Master Marketer program
- NRCS funded the four-year project committing to give Master Irrigator graduates preferential access to 1.6 million dollars of EQIP cost-share funding
 - \$400,000/ year
 - Conservation projects funded must be within currently approved NRCS conservation practices

Developing the Master Irrigator Training

- In consultation with “knowledgeable” people develop a list of potential topics
- Conduct a baseline survey to establish current levels of water conservation equipment/management techniques practiced
- Establish a Project Advisory Committee (PAC) to develop the training and oversee all aspects of the project
- PAC membership includes producers, NPGCD personnel and representatives from Industry, NRCS, TWDB and Texas A&M AgriLife
- PAC met five times the first year and currently meet twice a year to review results and determine changes to upcoming training

Project Evaluation

- Evaluation occurs in two steps: short term to evaluate the training and long term to evaluate the overall project effectiveness (adoption levels)
- **Short Term:**
 - Participants are surveyed to determine the value of topics & speakers along with perceived adoption interest.
 - Number of producers attending, current level of participant adoption and participant's irrigated acreage are also obtained

Long Term Project Evaluation - Adoption

- **First step:** Survey producers in the NPGCD to establish a baseline of the current level of adoption
- Survey training participants to establish a baseline of the current level of adoption
- At the end of the project, resurvey training graduates to determine level of adoption that has occurred (***Direct effect***)
- At the end of the project, resurvey NPGCD producers to determine level of adoption that has occurred (***Indirect effect***)

2019 Master Irrigator Training

- **All sessions held at the WCC – 9:00am – 4:45pm**

- March 20: Session I – Agronomics
- March 27: Session II – Irrigation Scheduling
- April 3: Session III – Systems
- April 10: Session IV – Systems & Special Topics

*“The brain can absorb
only what the butt
can withstand”*

- **Basic Training Parameters:**

- Registration limited to 25 participants
- Registration fee --- \$100/participant
- Preference given to producers who operate in the NPGCD
- Participants need to attend all sessions to graduate and be eligible for NRCS cost-share

Session I Agenda: Agronomics

- Soil Health and Residue Management
- Economics of Soil Health and Residue Management
- Fertility Management
- Monitoring Moisture Stress and Plant Growth
- Using Cover Crops to Improve Soil Health
- Producer Panel

Session II: Irrigation Scheduling

- Funding Opportunities with EQIP
- Economics of Irrigation Scheduling
- Pre-water and Planting Dates
- Irrigation Scheduling
- Measuring Crop Water Use
- Data Interpretation & Strategic Irrigation Management
- Producer Panel

Session III: Irrigation Systems

- Economics of Irrigation Systems
- Genset
- Center Pivot Irrigation Systems and Improving Application Efficiency
- Pivot Shutoff, Track Management, Variable Rate Irrigation and Remote Monitoring
- Producer Panel

Session IV: Systems & Special Topics

- 2019 Crop Profitability Analyzer
- Variable Frequency Drives
- Remote Sensing
- Satellite Imagery & the Use of Drones
- Subsurface Drip Irrigation Systems
- Producer Panel
- EQIP Funding for Master Irrigator Graduates

GRADUATION!!!

Master Irrigator Training Registration, Irrigated Acreage and NRCS Cost-Share by Year

	2016	2017	2018	Total
Initial Training Registration	25	26	22	73
Irrigated Acreage	62,090	64,679	86,766	213,535
NRCS Cost-Share:				
Contracts	46	38	5	89
Funding	\$392,590	\$421,284	\$227,496	\$1,041,370

¹ 2018 numbers are tentative

Master Irrigator Training: Session and Overall Evaluation, 2016 -2018¹

	2016	2017	2018
Session I - Agronomics	4.32	4.52	4.62
Session II - Irrigation Scheduling	4.38	4.57	4.59
Session III - Irrigation Systems	4.69	4.81	4.50
Session IV- Systems & Special Topics	4.62	4.70	4.62
Master Irrigator - Overall Training	4.77	4.60	4.81

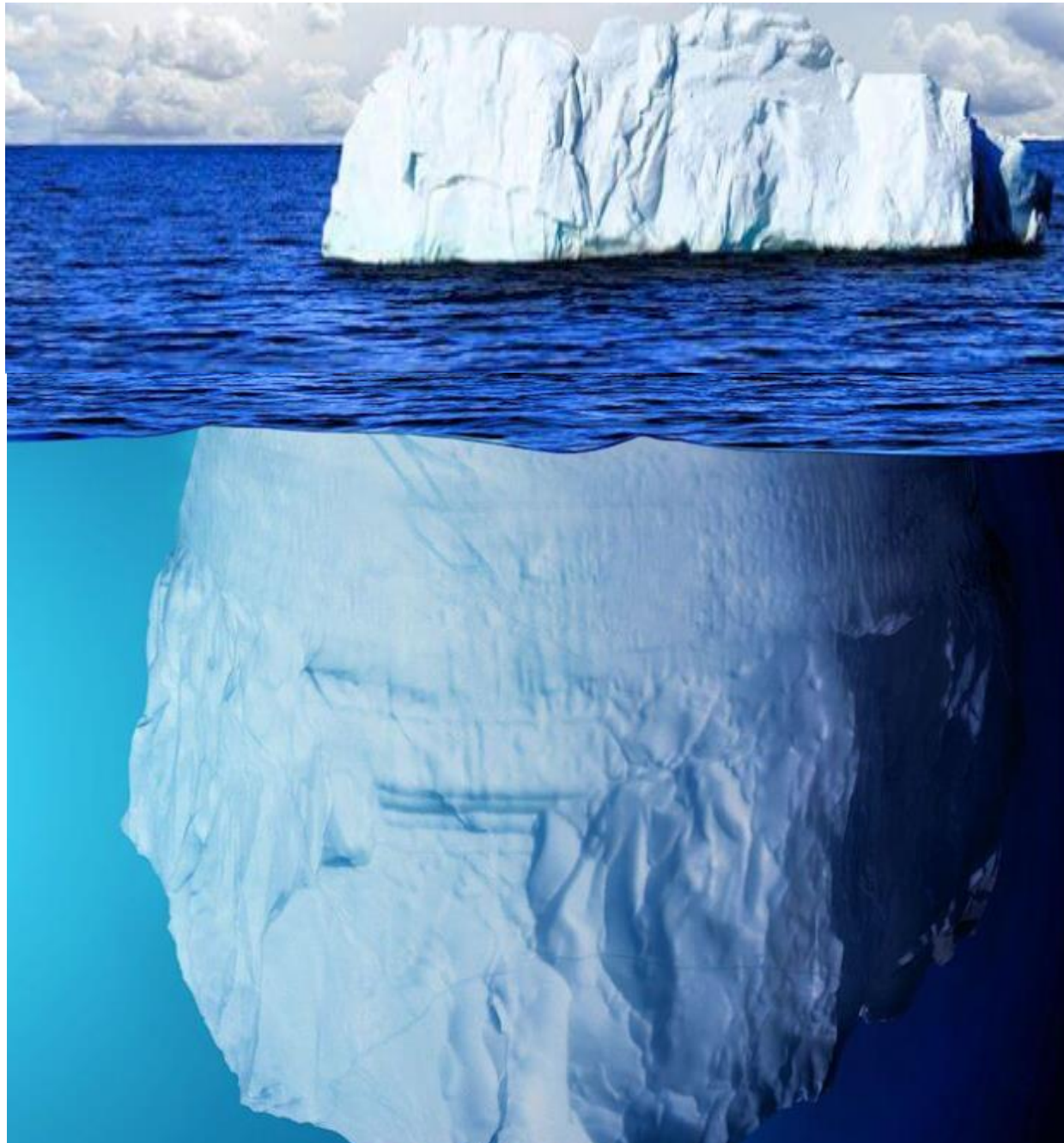
¹ Likert 1 – 5 scale with 1= poor and 5 = excellent

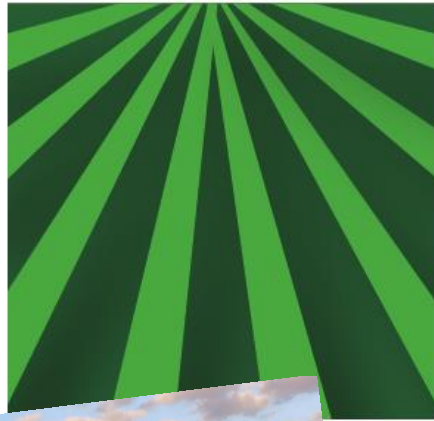
2017 & 2018 Source of Registration Survey

To help us advertise more effectively in the future: What ultimately led you to sign up for Master Irrigator?

- a. Radio spot reminding me to sign up - **0**
- b. Newspaper ad reminding me to sign up - **0**
- c. The brochure sent to my house - **11**
- d. A social media post I saw - **2**
- e. An email I received from North Plains GCD - **11**
- f. Communication with a friend, who encouraged me to sign up - **13**
- g. Other - **4**
 - b. Please specify : Pioneer Field Day, CEU meeting in Dalhart, Other programs

What the Master Irrigator Project Has in common with an Iceberg





The Master IRRIGATOR


 “We cannot stop doing
 we lose everything.”
 2016 Master Irrigator Graduate

The Master Irrigator Program is an irrigation management education program made up of 24 hours of intensive irrigation education and conservation training. Participants will learn how to maximize water efficiency, conserve energy, build soil, and work together to save water, conserve energy, build soil, and enhance farm profitability. Participants who complete the program will receive their Master Irrigator Certification and receive their Master Irrigator Certification funding to the NPGCD EQIP funding.

March 22, 2017 Agronomics
 March 29, 2017 Irrigation Scheduling
 April 5, 2017 Systems
 April 12, 2017 Systems & Special Topics

Registration will be accepted for up to 25 participants or until March 10, 2017.

To apply or for more information go to
northplainsgcd.org/masterirrigator,
 or call NPGCD at (806) 935-6401.


 United States Department of Agriculture
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Graduate of



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 “We cannot stop doing better or we lose
 everything.” -2016 Master Irrigator Graduate

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Master Irrigator Promotion POA

- Board and Master Irrigator Graduate Recruiting – Word of mouth starting when dates are set
- Direct mail Save The Date (STD) Cards in conjunction with Amarillo Farm and Ranch Show – last week of November
- Posters in FSA/NRCS office, implement dealers and farm stores
- Media Release to newspaper and radio December – continue throughout
- Start Social Media – December – continue throughout
- Brochure mailing - mid-January, after Pioneer Hi-Bred Meetings
- Email Campaign to Producers, after Pioneer Hi-Bred Meetings
- Trade Shows -
Amarillo Farm and Ranch in Late Nov.
Local Pioneer Hi-Bred Educational Meetings in January
High Plains Irrigation Conference in February
...and any other local meetings to get in front of growers!!
- Paid Radio and Newspaper (if necessary)

Master Irrigator Program Cost

- **The training is not Cheap!!**
- **Out-of-pocket expenses:** notebooks, program materials, meals, speaker expenses, promotion materials including reminder cards, registration brochures, web presence, etc. and advertising expense.
- **Personnel Cost:** Program coordinator and support personnel to handle online effort, promotion, registration, meeting logistics, accounting, etc.
- **Program Cost EWAG: \$2500 - \$3000/participant**

2019 Master Irrigator Program – Year 4

How is registration going????

SOLD OUT!!
OVERFLOWING

Why Should They Attend the Training? Economics!!

- Yes, you invest in a \$100 registration fee and four days of your time to attend the training **but.....**
 - Exposure to the latest irrigation techniques & strategies presented by experienced experts - all information included in a notebook for each session
 - In addition, you get 4 breakfasts and 4 lunches
- More importantly, if you learn something that saves you an acre-inch without hurting your yield.....
 - Out of pocket savings \$8.00/acre-inch. For a 1000 irrigated acres --- **\$8000**. Over a 5-year period ---- **\$40,000**.
 - When the saved ac-in is applied @ \$3.50/bu. X 10 bu./ac-in = \$35/acre - \$8.00 (cost) = \$27.00/acre or **\$27,000** for a 1000 irrigated acres or over a 5-year period --- **\$135,000!!!**

Cumulative Master Irrigator Participant Adoption Assessment

- Do you plan to use/adopt the information/tools you learned during your Master Irrigator training?
 - YES: **51**
 - No: **0**
 - TBD: **1**

To Get More Information About the Master Irrigator Program -----

- Go to North Plains Groundwater District Website - - -
 - <http://northplainsgcd.org/masterirrigator>
- Contact Kirk Welch or Julia Stanford at the NPGCD (806-935-6401) or Steve Amosson (806-677-5600)
 - kwelch@northplainsgcd.org
 - jstanford@northplainsgcd.org
 - samosson@ag.tamu.edu



Questions???

The End

