

Water-Wise Irrigation Perceptions and Practices Phase II

Fact Sheet



The WWIPP Phase II program aimed to capture outdoor water use savings by educating homeowners on irrigation principles through monthly/seasonal newsletters that focused on principles of irrigation scheduling.

The research area was within the Pinellas-Anclote River Basin under the jurisdiction of the Southwest Florida Water Management District (SWFWMD). The questionnaires and newsletters were developed by the University of Florida and reviewed by the SWFWMD.

Program Participation

Potable Users
21 participants

Reclaimed Users
28 participants

Nonparticipant
Potable Users (n=100)

To determine any effect on outdoor water use by the participant homes during the study period, the estimated outdoor use was compared to a nonparticipant group during the same period, a theoretical irrigation need, and the estimation of outdoor water use for the participant group prior to the study. Potable water savings were significant when compared to the estimated irrigation application of the participant group to the nonparticipant group ($p=0.028$) and the theoretical need ($p=0.025$) during the study period. Additionally, a correlation existed between the increase in knowledge and decrease in water use over time. Evident by the low water use ratio, 0.6, the sample population of both participants and nonparticipants are water conservative.

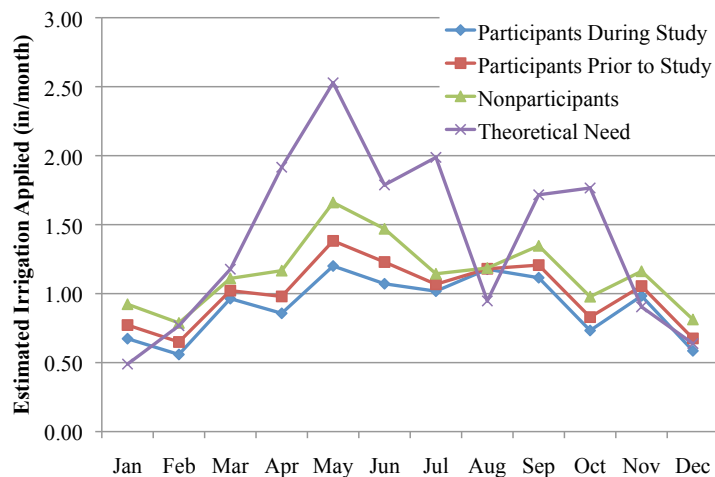
Program Steps

- Solicitation of participants with sign-up web link.
- Irrigation system evaluation interview. This interview established current irrigation habits and baseline information regarding irrigation system and lawn/landscape.
- Homes were contacted at monthly or seasonal intervals, encouraging the reprogramming of irrigation time clocks.
- Utility data obtained from Tampa Bay Water GovNet online database.
- This data was used to monitor the proposed outcome and reduction of water use as a feedback loop.

Irrigation Schedule Matrix

- Each newsletter contained a new unique seasonal or monthly run time schedule.
- Aside from the run time matrix, the seasonal newsletter is the same as the monthly newsletter for the first month of each season.
- Reclaimed water participants received run times only listed by equipment type (spray head versus rotor head).

Program Evaluation



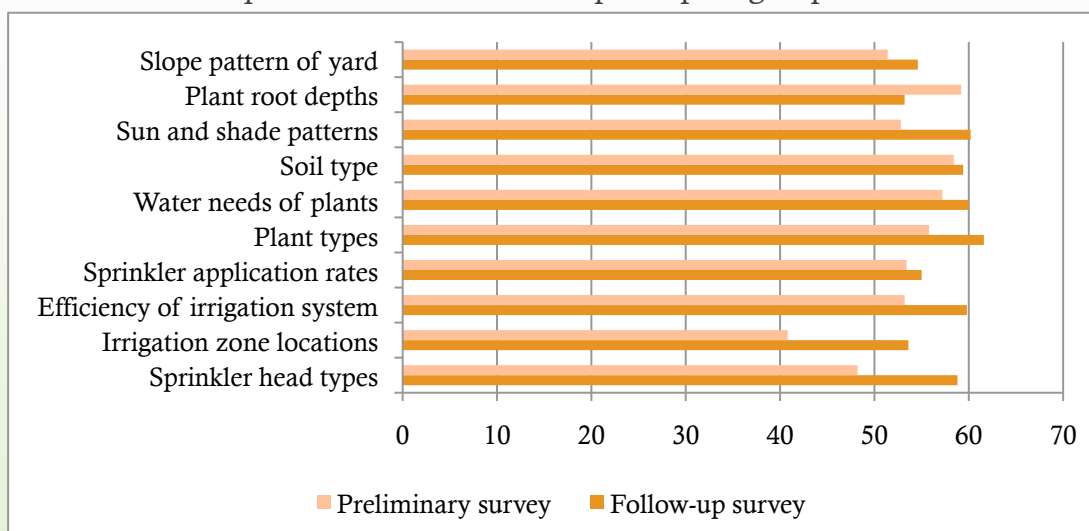
The primary objective of the program was to promote the use of irrigation scheduling. From the self-reported expected behavior change, 93% of participants plan continued fulfillment of this objective aim. In WWIPP Phase I, only 69% of the participants actually fulfilled this aim, based on self-reported data.

Knowledge score was calculated from the response to questions on preliminary and follow-up surveys regarding a broad spectrum of the landscape and irrigation system characteristics discussed in the subject matter of the program newsletter.

Based on the follow-up survey responses, there was a gain in knowledge by the program participants for all characteristics aside from plant root depths (where the follow-up survey yielded less understanding) and soil type (where the responses remained approximately equivalent). Greatest increases in knowledge score were reported for the irrigation system characteristics regarding zone locations and sprinkler head types.

Both irrigation zone locations and sprinkler head types were an integral part of the irrigation evaluation interview. Participants were asked to record this information in an effort to obtain the proper run time recommendations for their “unique” systems. The exercise yielded a positive principle in increased learning and retention. Therefore, the program promoted active learning with interactive information provided regarding water conservation research results. Furthermore, by incorporating hands-on interaction with the irrigation system, cognitive learning was enhanced.

The newsletter click count averaged 91% per newsletter issue. This high level of response concurs with the expressed interest and consequential motivation of the participant group.



Knowledge scores from preliminary (reclaimed water group only, n=28) and follow-up (all participants, n=45) surveys for landscape and irrigation system characteristics