As Hamilton County Commissioner, Dickie Clary, who serves as a Hamilton County Commissioner, first started learning about water quality issues and regulations so he could best serve his constituents, who were faced with two impaired water bodies: the Leon and Lampasas rivers.

After identifying certain parts of the Leon River below Lake Proctor as impaired, in 2002, the Texas Commission on Environmental Quality (TCEQ) initiated a total maximum daily load (TMDL).

“I got involved with the Leon River TMDL process several years ago when TCEQ told us that there was an impairment,” Clary said. “I didn’t know anything about water quality issues, so I educated myself, went to meetings, and studied how TMDLs work.”

The resulting TMDL report suggested that bacteria loadings into the Leon River needed to be reduced by about 21 percent to meet water quality standards and support contact recreation use. According to the Texas State Soil and Water Conservation Board (TSSWCB), local stakeholders wanted to take an active role in developing management strategies to reduce bacteria loadings.
and, in 2006, the board and the Brazos River Authority (BRA) began facilitating the WPP process.

“Now I’m learning about watershed protection plans,” Clary said. “Community involvement in developing the WPP has been extremely positive and everyone has felt like their input was valuable. I feel that when the WPP is made public, people won’t see it as intrusive, but see it as our best ideas, our plan.”

The Leon River WPP final draft will be released for public comment soon, and the neighboring Lampasas River WPP is still in stakeholder development, Clary said.

“Mr. Clary has been very active in the Leon River and Lampasas River WPPs and has become a spokesperson for rural Texans on bacteria water quality issues, especially the TMDL and bacteria water quality standards revision processes administered by TCEQ,” Wagner said.

As he and other stakeholders continue to work toward implementing the WPPs, Clary said he will continue learning and working with the community to improve local water quality.

“Our community and I fully support the WPP, and I think it’s just the right focus,” Clary said. “It’s ultimately up to the stakeholders to implement it.

It gives us the opportunity to solve our own problems.”

The High School Student

Regularly measuring local water quality isn’t exactly a popular activity for most teenagers, but it is a normal routine for 14-year-old Weslaco resident Ruben Saldaña Jr. In November 2009, Saldaña started volunteering with Texas Stream Team, and his interest in water quality has only grown since.

Texas Stream Team is a network of more than 1,400 trained volunteers who collect water quality data on rivers, streams, wetlands, bays, bayous, and estuaries across the state. Established in 1991, it is administered through a cooperative partnership among Texas State University, TCEQ, and the EPA.

“Through my 4-H club, I got trained by Texas Stream Team, and I really started getting involved with it,” Saldaña said. “They told me to pick one sampling site, so I chose three—one each in the upper, middle, and lower Arroyo Colorado.”

The Arroyo is an impaired water body because of its bacteria levels, and Saldaña said that his findings have supported that. After testing samples at each site once or twice a month, the high school freshman has observed fluctuations in water quality.

“E. coli counts were really high after Hurricane Alex,” Saldaña said.

Saldaña’s eighth-grade science project focused on his volunteer water sampling. He earned first place in district and regional fairs, and eventually competed at the state science fair. He also presented his findings to a stakeholder meeting of the Arroyo Colorado Watershed Partnership, which is managed by TWR1.

“When I went to the state science fair, I told other kids about Texas Stream Team and tried to get them involved,” Saldaña said. “Organizations need kids’ input too, because we have good ideas to contribute.”

On Aug. 15, 2010, he had an opportunity to influence a wider audience. Saldaña and Jaime Flores, watershed coordinator for the Partnership, were featured on “Inside the Valley,” a news segment on KRGV Channel 5 in the Rio Grande Valley. Flores and Saldaña discussed pollutants contaminating the Arroyo Colorado and how residents could help improve water quality.
creek. "Buck Creek has gone "from landowner Burl Brim, according to Buck Creek."

"I've known Buck Creek since I was in preschool," Brim said. "I've fished it, I've swum in it, I grew up in it, and it has been a wonderful place for me over the years. But I've seen Buck Creek go from a very, very nice creek to a part-time creek."

Burl and Mary Brim first read about the WPP development for Buck Creek, a small water body within the Red River Basin, in the Wellington newspaper. The WPP project was initiated because water quality monitoring data showed elevated bacteria levels in the creek, possibly making it unsafe for recreation.

The project team identified sources of *E. coli* in the creek using bacterial source tracking, evaluated potential management alternatives for restoring the water body, and taught landowners like the Brims the benefits of best management practices.

"We learned some really important things through this process," Brim said. "My dad farmed cotton and grain sorghum for many years, but when we came back to the farm, which was inevitable, we turned it back into grass and trees. I knew that soil conservation was very important and that water was tough to control, because I grew up in agriculture."

Local water may be difficult to control, but Buck Creek stakeholders have helped improve it. When TCEQ released the draft of the 2010 Integrated Report (previously known as the Texas Water Quality Inventory and 303(d) List), it proposed removal of Buck Creek from the list.

"The removal of Buck Creek is a direct result of the efforts of local landowners," said Lucas Gregory, the TWRI project manager coordinating the Buck Creek project. "Stakeholders have adopted and implemented numerous management practices discussed during stakeholder meetings and educational workshops; these practices have certainly influenced the quality of water in Buck Creek."

In addition to participating in the Buck Creek project, the Brims sometimes host elementary school class field trips at their ranch. After working as a professional watercolor painter and teacher for 40 years, Brim appreciates children’s interest in nature and sees a need for youth water education.

"Kids are drawn to what’s here in creation, and I really believe that we have to teach kids about these things and get them involved in helping the environment—kids enjoy that," Brim said. "Every school ought to have kids learning about water firsthand by regularly monitoring water quantity and quality."

Currently, the draft Buck Creek WPP is being reviewed by TSSWCB and will then be reviewed by stakeholders. In the meantime, the Brims will continue to implement what they’ve learned.

"I think getting involved with local water issues is an opportunity to learn," Brim said. "It’s an important opportunity to find out what other folks are doing to protect the environment and how you can help."

**The Solution**

Thanks to opportunities such as EPA’s Clean Water Act Section 319(h) grant program, water quality improvement projects are being funded and implemented through TCEQ, TSSWCB, and other agencies and universities across the state—combining financial and scientific support with grassroots efforts and local decision making.

"I’m a firm believer in local decision making," Wagner said. "There’s nobody better qualified to identify the ‘fixes’ to local issues than local residents and decision makers."

"Landowners and stakeholders usually already have a pretty good idea about what is causing local water quality issues in the first place," Gregory said. "Including their ideas into a project saves time and money more often than not."

Every WPP project begins and continues with stakeholder involvement, and TWRI and agency personnel value the input, observations, and wisdom that locals have to offer.

"Stakeholder involvement in a project gives it local credibility," Gregory said. "One of the most helpful things that stakeholders can do to help enhance the success of local implementation efforts is to become an advocate for the project—participating, providing honest thoughts and comments, and encouraging other people in the watershed to participate."

To learn how to impact local water quality, see the list of programs and resources at twri.tamu.edu/txH2O.

---

From top:

Burl Brim along with his wife, Mary, are active in the watershed protection plant for Buck Creek.

Buck Creek, according to landowner Burl Brim, has gone “from a very, very nice creek to a part-time creek.”

Saldaña said he plans to study biology at Texas A&M University, but is also considering a field involving water. For now, he will keep studying and advocating for youth involvement in water quality and the Texas Stream Team.

**The Rancher**

Burl Brim grew up near Buck Creek in the Texas Panhandle. He and his wife, Mary, have witnessed the evolution of the creek’s flow and quality since they moved back to his family’s farm near Wellington.

"I’ve known Buck Creek since I was in preschool," Brim said. "I’ve fished it, I’ve swum in it, I grew up in it, and it has been a wonderful place for me over the years. But I’ve seen Buck Creek go from a very, very nice creek to a part-time creek."

Burl and Mary Brim first read about the WPP development for Buck Creek, a small water body within the Red River Basin, in the Wellington newspaper. The WPP project was initiated because water quality monitoring data showed elevated bacteria levels in the creek, possibly making it unsafe for recreation.

The project team identified sources of *E. coli* in the creek using bacterial source tracking, evaluated potential management alternatives for restoring the water body, and taught landowners like the Brims the benefits of best management practices.

"We learned some really important things through this process," Brim said. "My dad farmed cotton and grain sorghum for many years, but when we came back to the farm, which was inevitable, we turned it back into grass and trees. I knew that soil conservation was very important and that water was tough to control, because I grew up in agriculture."

Local water may be difficult to control, but Buck Creek stakeholders have helped improve it. When TCEQ released the draft of the 2010 Integrated Report (previously known as the Texas Water Quality Inventory and 303(d) List), it proposed removal of Buck Creek from the list.

"The removal of Buck Creek is a direct result of the efforts of local landowners," said Lucas Gregory, the TWRI project manager coordinating the Buck Creek project. "Stakeholders have adopted and implemented numerous management practices discussed during stakeholder meetings and educational workshops; these practices have certainly influenced the quality of water in Buck Creek."

In addition to participating in the Buck Creek project, the Brims sometimes host elementary school class field trips at their ranch. After working as a professional watercolor painter and teacher for 40 years, Brim appreciates children’s interest in nature and sees a need for youth water education.

"Kids are drawn to what’s here in creation, and I really believe that we have to teach kids about these things and get them involved in helping the environment—kids enjoy that," Brim said. "Every school ought to have kids learning about water firsthand by regularly monitoring water quantity and quality."

Currently, the draft Buck Creek WPP is being reviewed by TSSWCB and will then be reviewed by stakeholders. In the meantime, the Brims will continue to implement what they’ve learned.

"I think getting involved with local water issues is an opportunity to learn," Brim said. "It’s an important opportunity to find out what other folks are doing to protect the environment and how you can help."

**The Solution**

Thanks to opportunities such as EPA’s Clean Water Act Section 319(h) grant program, water quality improvement projects are being funded and implemented through TCEQ, TSSWCB, and other agencies and universities across the state—combining financial and scientific support with grassroots efforts and local decision making.

"I’m a firm believer in local decision making," Wagner said. "There’s nobody better qualified to identify the ‘fixes’ to local issues than local residents and decision makers."

"Landowners and stakeholders usually already have a pretty good idea about what is causing local water quality issues in the first place," Gregory said. "Including their ideas into a project saves time and money more often than not."

Every WPP project begins and continues with stakeholder involvement, and TWRI and agency personnel value the input, observations, and wisdom that locals have to offer.

"Stakeholder involvement in a project gives it local credibility," Gregory said. "One of the most helpful things that stakeholders can do to help enhance the success of local implementation efforts is to become an advocate for the project—participating, providing honest thoughts and comments, and encouraging other people in the watershed to participate."

To learn how to impact local water quality, see the list of programs and resources at twri.tamu.edu/txH2O.