Texas Watch
Volunteer Environmental Monitoring
Trainer's Manual

December, 1994
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I. INTRODUCTION

Texas Watch is delighted you have decided to become a Certified Trainer of Water Quality Monitors. We are proud of our commitment to assuring excellence in volunteer monitoring. The Texas Watch Quality Assurance Project Plan (QAPP) is the cornerstone of this dedication to excellence in monitoring. The Texas Watch QAPP is approved by the United States Environmental Protection Agency (EPA) and is the basis for assuring Texas Watch data users that the data are of the highest quality possible. The policies developed by Texas Watch regarding the training of monitors have been designed to meet the goals and objectives of this QAPP. Texas Watch strongly recommends all new trainers become familiar with the QAPP before beginning trainer training. This QAPP is available from the Texas Watch office in Austin.

This Trainer's Manual is designed as a guide for trainers of the Texas Watch Volunteer Environmental Monitoring Program to plan and execute the three phases of training required to become Texas Watch Certified Trainers. The first part of this manual will guide you through the steps to becoming a Certified Trainer. It contains Texas Watch's philosophy on training, steps for certification, and a description of each training session you will be required to assist and lead in order to fulfill training requirements. It also describes participants' roles, explains trainers' responsibilities, and offers logistical tips to manage the sessions.

The second part of this manual will guide you in the responsibilities of being a Certified Trainer. It includes information on how to conduct a Phase III training, how to do site inspections, how to evaluate other trainers, and how to help interested people get involved in Texas Watch. Texas Watch hopes the Trainer's Manual will serve as a resource to provide an instructional framework for trainers.

Each training event will be unique in its own way, but each training event should be built around this training framework. Planning will allow you to assess whether the event was successful and determine your or your group's future training needs. This manual is your guide to successfully completing all three phases of volunteer training. Each trainer will develop his/her own distinct ways of instructing. If you find some of these ideas do not work well or have ideas on how to improve our methods, please let us know.
II. GOLDEN RULES

Citizen volunteers are very special people who give their time and energy to protect and conserve the waters of Texas. Some may be professional scientists, or teachers versed in biology, chemistry or geology. Some may be just regular folks with no real background in science, just a lot of interest. Regardless of the citizens' backgrounds, these are people who have volunteered to undergo training either as a water quality monitor or as a trainer of water quality monitors. In all aspects of training it is very important to remember these GOLDEN RULES:

I. Be Positive

II. Dignify questions and answers

III. Check for understanding

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TexasWatch
Certificate of Achievement

Constance Zehner

is hereby awarded this certificate in recognition for participation, dedication and excellence as a
CERTIFIED TRAINER OF WATER QUALITY MONITORS

[Signature]
October 1, 1991

[Signature]
Program Coordinator, TexasWatch

A Texas Watch Certificate of Achievement is awarded to all trainers who successfully complete the trainer certification process.
III. TEXAS WATCH TRAINING PHILOSOPHY

To assure the quality of data gathered by volunteers, the quality of training for these volunteers must also be assured. To achieve this goal, Texas Watch believes all new trainers, regardless of teaching or technical background, must assist another trainer before leading a training session on their own. This hands-on modeling technique is required to be certified as a Trainer of Water Quality Monitors.

IV. STEPS FOR TRAINER CERTIFICATION

To become certified as a TRAINER OF WATER QUALITY MONITORS, a trainee must successfully complete the following steps:

STEP 1: Trainer trainee must be a Texas Watch Certified Water Quality Monitor.

STEP 2: Trainee assists a certified trainer in planning, coordinating, and presenting Phase I and II of a Texas Watch volunteer monitor training event.

STEP 3: Trainee plans, coordinates and presents Phase I and II of a volunteer monitor training event assisted by a certified trainer. Completed Trainer’s Training & Evaluation Record must be on file with Texas Watch.

STEP 4: Trainee is certified as a Trainer of Water Quality Monitors, and receives a Certificate of Achievement from the TNRCC.

TO MAINTAIN CERTIFICATION

Step 1: Trainer must either lead or assist at least two Phase I and II volunteer monitor training events per year.

Step 2: Trainer must submit training session attendance forms (provided by Texas Watch) to Texas Watch as record of participation in training events.

If yearly recertification lapses, trainer will be required to repeat Trainer’s Training Steps 2 and 3.
V. BECOMING A CERTIFIED TRAINER
HOW TO CONDUCT A THREE PHASE MONITOR TRAINING PROGRAM

GETTING STARTED,
TRAINING COORDINATOR'S CHECKLIST FOR
PHASE I & II TRAINING SESSIONS,
TRAINING EVENT TIME FRAMES,
OVERVIEW, ROLES, RESPONSIBILITIES, and LOGISTICS

In order for Texas Watch to meet data quality requirements by the EPA, an intensive three-phase training program has been established. Volunteers must complete these training sessions before they can be certified as water quality monitors and their collected data accepted. So that each training session will meet EPA standards, this chapter includes a checklist for organizational needs that precede the training event; an overview of each phase of the water quality monitor's training; the roles and responsibilities of the Training Coordinator, Training Mentors and Certified Trainer during each session; and logistical tips for easy event coordination.

GETTING STARTED

CHOOSING A TRAINING COORDINATOR

The Training Coordinator can be a Certified Trainer of Water Quality Monitors or a Certified Water Quality Monitor working on the third phase towards the completion of his/her Training Certificate. If the Coordinator is not a Certified Trainer of Water Quality Monitors, a Certified Trainer must be present to assist the Coordinator in planning and organizing the training event and to evaluate the Coordinator and Mentors.

After the Training Coordinator has been chosen, Training Mentors must also be selected. There must be one Training Mentor for every 5 volunteers. When there are fewer Mentors than this ratio, the volunteers may not get adequate individualized instruction. When there are more Mentors than this ratio, the Mentors may not get the instructional experience they need to become effective Trainers later on.

The Training Mentors may be Certified Trainers of Water Quality Monitors, Trainer Trainees working to complete the second phase of their training, or Certified Monitors who would simply like to help out at a training.
TRAINING COORDINATOR’S CHECKLIST FOR 
PHASE I & II TRAINING SESSIONS

☐ Recruit volunteers to be trained.

☐ Secure a location for the training. This location must have classroom space available, with easy access to sinks and water faucets (Phase I), plus access to a field monitoring location (Phase II).

☐ Notify volunteers of the date, place, and time of the training event.

☐ Secure from Texas Watch a Volunteer Training Packet (which includes three data forms and a commitment statement form) and a Monitoring Manual for each volunteer.

☐ Secure a Trainer’s Training & Evaluation Record for each trainee beginning their training as a Certified Trainer of Water Quality Monitors.

☐ Secure the following equipment to have on hand for Phase I and II training sessions:
  - a Texas Watch field kit which has passed a quality control session within the last six months for known results
  - a calibrated Hydrolab for known results during Phase I and II (optional)
  - a large cooler or tub to be filled with water whose properties are as close as possible to that which the volunteers will be testing
  - several waste containers, preferably with lids
  - monitoring kits (one for every 2 people, if possible)
  - squirt bottles filled with deionized water (extra deionized water is always useful)
  - clip boards for each volunteer (optional)
  - pH buffers 7 and 10 (if pH meters are used)
  - conductivity standard (as close to water sample as possible - if conductivity meters are used)
  - extra monitoring supplies (DO sample bottles, 20ml titration tubes, titrators, thermometers, 100ml beakers, etc.), so each monitor can run a DO test independently (when there is more than one monitor per kit)
  - safety goggles and surgical gloves for each monitor and trainer
  - paper towels
  - buckets with ropes for demonstrating bucket grabs in the field
  - extra training packets, data forms, manuals, etc.
TRAINING EVENT TIME FRAMES

Below are suggested time frames for Phase I and II of a training event. Most Phase I and II training events are held on the same day, usually a Saturday. However, sessions can be broken up and scheduled during the weekdays. When training events are held on the same day, the training usually begins at 9:00 am and concludes around 5:00 pm. When training a large group, ask folks to arrive around 8:30 to allow a little extra time for late arrivals. Also allow a 1-hour lunch break between Phase I and II to provide some “down time” from learning. Whether held on a weekend or during the week, the listed time allotments based on the number of volunteers to be trained will generally hold true.

PHASE I
Allow yourself approximately 30 minutes prior to the scheduled instruction start time to set up tables and put out equipment and materials.

2.5 to 3.5 hours Phase I Instructional Time: calibration of meters, conductivity or salinity, water temperature, dissolved oxygen, pH.

Phase I time allotment for instruction depends on the number of volunteers to be trained. If 5 or less volunteers are to be trained, instructional time will take about 2 hours. If volunteer numbers range from 5 to 15, allow 2.5 hours. If more than 15 volunteers are being trained, anticipate the full time allotment. The group size should be limited to no more than 20 people. When there are more than 20, volunteers seem to get “lost in the shuffle” and there tends to be a decrease in the quality of training for the volunteers.

30 minutes Closure, clean up, and making sure all questions are answered and volunteers know where and when to meet for Phase II.

PHASE II
2 to 3 hours Phase II Instructional Time: Guided Practice - discussion of field observations, field experience with sampling sequence, instruction on Secchi disk.

Phase II time allotment for instruction also depends on the number of volunteers to be trained. As with Phase I, allow 2 hours for 5 or less volunteers, 2.5 hours for 5 to 15 volunteers, and 3 hours for 15 to 20 volunteers. This does not include travel time to and from the field site!

30 minutes Closure, clean up and scheduling of Phase III training sessions.
OVERVIEW/ROLES AND RESPONSIBILITIES/LOGISTICS
OF PHASE I AND II TRAINING EVENTS

PHASE I TRAINING

Overview
Phase I training is a hands-on instructional session covering specific conductance (conductivity or salinity), air temperature, water temperature, pH, dissolved oxygen, and safety in a lab setting. The Secchi disk may be introduced in the lab with full instruction reserved for Phase II training.

A completed and approved monitoring plan must be on file with Texas Watch for each monitoring group/individual before a volunteer may be trained.

Before instruction begins, it is helpful to have everyone introduce themselves and briefly discuss their goals and concerns in monitoring. Any general materials about monitoring such as newsletters may be made available at this time.

Each volunteer will receive a Volunteer Monitor Training Packet where comments about each training session can be recorded. Included in each packet are: a Volunteer Commitment Statement for the volunteer’s signature; a Phase I Training Data Form; a Phase II Training Data Form; and a Phase III Training Data Form.

The training session begins as the Training Coordinator states the overall goals for this training event, objectives for each phase of the training, and reviews the steps that must be followed for someone to become a certified water quality monitor. Next, the volunteer fills in the necessary information on the front of the Volunteer Monitor Training Packet. Each volunteer must then read, understand, and sign the Volunteer Commitment Statement and the Liability Release before training begins. The Equipment Loan Agreement must be signed if the TNRCC is loaning equipment to the volunteer.

Ideally, the volunteers will work in groups of five or less and be led by a Training Mentor. The Training Coordinator should proceed with instruction as follows:

- covers “safety first” information from the volunteer manual, including information on kit care, maintenance and storage and the Material Safety Data Sheets;
- introduces the variable to be tested and explains why the test is important in understanding water quality;
- shows how the sampling for the test is done and how monitoring equipment for that test should be handled;
- covers safety concerns for each test;
- demonstrates the complete water quality test to the volunteers.
The volunteers then perform the water quality test under the watchful eye of their Training Mentor. Strict adherence to safety procedures must be maintained at all times. Once all volunteers understand how to perform the test and all questions about that test are answered, the Training Coordinator may move on to the next test.

At the end of Phase I, after all questions have been answered and the volunteers are comfortable with the testing procedures, the Training Coordinator signs the Phase I Training Data Form. The Training Coordinator or Mentor also writes any comments applicable to the successful completion of the training session and the volunteer’s understanding of all safety procedures on the front of the Volunteer Monitor Training Packet under Phase I “comments”. All equipment should be cleaned and stored prior to Phase II training.

**VERY IMPORTANT:** The volunteer monitors are responsible for keeping their training packets until the completion of Phase III. They should be reminded to bring their manuals and training packets to each of the training sessions.
Roles and Responsibilities for Phase I

Training Coordinator
- Notify all interested individuals about the training session. If Phase II is scheduled for the same day, instruct participants to dress appropriately for the weather.
- Coordinate the logistical arrangements for the training session (room, date and time); set up, and equipment.
- Lead the instructional sessions on each variable, or if Coordinator is a Certified Trainer, then allow Mentor(s) to lead some of the instruction.
- Assist the Certified Trainer in evaluating the Training Mentor(s) if they are working on trainer certification.
- Sign and date each monitor’s Training Data Form and fill in appropriate comments on Volunteer Monitor Training Packet.
- Review the “known” results (from the Hydrolab or your test kit) with the volunteer’s results.

Training Mentor
- Be prepared to lead the instruction session for each variable.
- Oversee the successful completion of each testing procedure for the volunteer monitor(s) placed under your guidance.
- Assist Training Coordinator in reviewing the “known” results from the session with the volunteers’ results.
- Ensure the back of the Monitoring Training Packet is filled out for each of your volunteer(s) indicating variables tested, volunteer’s values, and known values. The Mentors or volunteers may record this information. The source of the known value also must be indicated.

Certified Trainer (must be present if Coordinator is not a Certified Trainer)
- Assist the Training Coordinator in the planning and coordination of the training session.
- Evaluate the Training Coordinator and make notes for his/her Trainer’s Training & Evaluation Record.
Logistics of Phase I

- The Phase I training session should be set up in a lab or classroom. A work space should be chosen for easy manipulation of the testing equipment and access to sinks and water.
- Restrooms should be available nearby.
- Tables and chairs should be set up to seat no more than 2 volunteers per training kit.
- A blackboard or a large-ruled writing pad is handy for sharing data and visual instructional aides. Remember chalk and/or magic markers!
- If Phase I is held in the morning, refreshments help get the fog out of peoples’ heads. Just make sure all drinks are removed from the work area prior to instruction. Beverages and chemicals don’t mix!
- If the volunteers you have recruited do not know one another, name tags are always a plus. This also helps trainers who may have come from other groups to assist.
- Check Training Coordinator’s Checklist for equipment to have on hand for this session.

PHASE II TRAINING

OVERVIEW
To begin Phase II, the Training Coordinator states the objectives to be accomplished during this phase of training, and what equipment will be taken to the monitoring site. The volunteers will practice the monitoring procedures they learned during Phase I training, so they will need to take their monitoring kit, manual and training packet with appropriate data forms to the monitoring site. Safe access to the monitoring site and safe monitoring procedures will be emphasized. The water body to be tested during Phase II should be similar to the sites the volunteers will eventually be monitoring. If Phase II is on a different day from Phase I, monitors should be given time to calibrate their meters before heading to the Phase II training field site.

During Phase II, the tests will be conducted under the guidance of the Training Mentor. Training Mentors will allow the volunteers to conduct the tests with minimal supervision, as their emphasis will be on careful observation of the volunteer’s procedures, answering questions, and correcting any obvious mistakes.

At the monitoring site, the volunteers will work in small groups led by their Training Mentor. The volunteer will write the date, location, and Training Coordinator name for the Phase II Training on the front of his/her training packet. The calibration information, if performed earlier in the day at Phase I, should be transferred to the Phase II Data Form. The monitoring location and monitor name also should be filled in at this time.

The Training Coordinator or Mentor should first introduce the field observations and explain how to record this information on the data form. Following this introduction, explain how to choose a representative sampling site at the location and how to safely take a sample from this site. A bucket grab sample as well as insitu sampling should be demonstrated to the volunteers.
The volunteer monitors should perform the following monitoring sequence:

1. Make careful observations about the conditions of the water, weather and other pertinent facts and record these on the data form.
2. Measure and record air temperature.
3. Collect a water sample if doing a bucket grab.
4. Collect the dissolved oxygen samples from either the bucket or stream and perform the rest of the dissolved oxygen test. Record values on data form.
5. Collect conductivity/salinity and water temperature sample from the bucket or stream. Perform those tests and record values on the data form.
6. Collect pH sample from bucket or stream. Measure and record pH values on data form.

At this point, the Training Coordinator should instruct the volunteers, in one large group, how to perform the Secchi disk measurement and total depth measurement. After monitors understand these tests and all questions are answered, the sequence continues as follows:

7. Measure and record water clarity.
8. Measure and record total depth.
9. Clean and store equipment.

After all questions have been answered and the volunteers finish reporting their data on the Phase II Training Data Form, the volunteer and the Training Mentor will discuss the volunteer’s strong points and weak points with respect to the testing procedures. The Training Coordinator will then sign the Phase II Data Form and record any applicable comments on the front of the Volunteer Monitor Training Packet. The volunteer monitors are then given their training packets to keep until Phase III training. They should be reminded to bring all paperwork and manuals to the Phase III training.

Returning to the lab setting for closure and equipment cleanup is advisable if Phases I and II are held together. Phase III trainings also can be scheduled at this time.
Roles and Responsibilities for Phase II

Training Coordinator

- Notify all interested individuals about the training session. Instruct them to dress appropriately for the weather.
- Coordinate the logistical arrangements for the training session; set up at nearby water body and provide equipment.
- Assist the Training Mentors with their volunteers if needed.
- Assist the Certified Trainer in completing the Trainer Evaluation Record for the Training Mentor(s) working on certification. Return the evaluation forms to the Mentors.
- At the end of the Phase II training session, Phase III training sessions should be scheduled for each volunteer. This can be accomplished in three ways:
  1. The Training Coordinator may complete any of the Phase III trainings himself.
  2. The Certified Trainer present may complete any of the Phase III trainings himself.
  3. Any other Certified Trainer may be scheduled to perform the Phase III trainings.

Training Mentor

- Be prepared to lead your group in the instruction sequence in the field.
- Oversee the successful completion of each testing procedure for the volunteer monitor(s) placed under your guidance.
- Assist Training Coordinator in reviewing the "known" results from the session with the volunteers' results.
- Ensure the back of the Monitoring Training Packet is filled out for each of your volunteer(s) indicating variables tested, volunteer’s values, and known values. The Mentor or the volunteers may record this information. The source of the known value also must be indicated.

Certified Trainer (must be present if Training Coordinator is not a Certified Trainer)

- Assist the Training Coordinator in the planning and coordination of the training session.
- Complete the Trainer Evaluation Form for the Training Coordinator and return to him/her.
- Assist with Phase III training assignments.
Logistics of Phase II

- The Phase II training session should begin in a convenient meeting place before going to the field. If Phase II is not held in conjunction with Phase I, meters should be calibrated before going out to the field.

- Refreshments should be made available to volunteers especially in hot weather. Likewise, access to cover from the sun and weather is very important. Restroom availability is also a plus!

- If Phase I and Phase II are held on the same day, it is usually convenient to start Phase I about 9:00 a.m. When Phase I is complete, break for lunch, and return after lunch to the classroom or lab before heading out to the field site.

- Check Training Coordinator's Checklist (page 5) for equipment to have on hand for this session.
VI. RESPONSIBILITIES OF A CERTIFIED TRAINER

Once a Trainer trainee has successfully assisted a Phase I and II training event and has successfully coordinated and led a Phase I and II training event, he or she is considered a Certified Trainer of Water Quality Monitors. Once certified, a trainer has a responsibility to ensure the ongoing quality assurance of the Texas Watch program in the future training events in which he or she participates. This section of the manual will describe some of the various responsibilities of a Certified Trainer.

PHASE III TRAINING

OVERVIEW
One of the first activities you will participate in as a Certified Trainer is to conduct Phase III trainings for volunteers. These training events usually take from 1.5 to 2.5 hours to complete, depending on the number of monitors being checked out at that site. If more than one monitor will be monitoring a particular site, a trainer may conduct all the Phase III trainings for those monitors at one time (within reason). Care should be taken to ensure each monitor is carefully observed in all portions of the testing. Another trainer may need to be on hand to ensure a low trainer to volunteer ratio.

Phase III trainings should occur within six weeks of a completed Phase II session. When more than six weeks has lapsed, the trainer should schedule an additional field visit with the volunteer before conducting a formal Phase III training. The new Texas Watch Training Refresher video can help if volunteers need to review the tests’ instructions before attending the Phase III training. Contact Texas Watch in Austin to receive a copy of this training refresher video.

It is very important that the trainer feel comfortable with the volunteer’s ability to perform the tests safely and accurately at a Phase III before the Phase III is scheduled. Phase III is not a time for instruction! If more than six months has passed since Phase II, the volunteer must go through the Phase I and II training again. For this reason, it is imperative that trainers do as much as they possibly can to ensure each monitor has the opportunity to finish their training within the allotted time.

Phase III training should begin in a home, office, or classroom environment to ensure that the conductivity meter and, if necessary, pH meter, are calibrated under the proper room temperature conditions. Continue on to the volunteer’s scheduled monitoring site, preferably around the time when the volunteer will be regularly monitoring. The trainer will work with each individual volunteer to complete this phase of the training. The trainer and the volunteer will check to make sure that the sampling site is the correct location as indicated in the Monitoring Plan. The trainer will also assess the site for safety and representativeness. (See next section on Site Assessment).

The trainer first will review the objective(s) for this session. The trainer then will observe as the volunteer conducts the monitoring tests at the site. The trainer also will obtain known values with a Hydrolab or his own Texas Watch kit at this time. The volunteer now should be able to work through the different tests and complete the Phase III Data Form with minimal direction from the
trainer. Discuss all safety and data quality assurance considerations again at this session.

Upon completion of this monitoring event, if the Trainer believes the volunteer monitor has successfully completed the three training sessions, the Trainer will complete the Phase III portion on the back of the Volunteer Monitor’s Training Packet and will sign off on the front of the packet. The packet will be sent to Texas Watch in Austin and remain on file with the TNRCC.

**PHASE III TRAINING CHECKLIST**

- Secure the following equipment to have on hand for a Phase III training session:
  - a calibrated Hydrolab or reliable Texas Watch field kit for recording known values
  - extra equipment for Texas Watch field kit in case of breakage
  - squirt bottles filled with deionized water
  - waste container
  - extra gloves and goggles
  - paper towels
  - make sure volunteer monitor has access to necessary pH buffers and conductivity standards for meter calibration before going to his/her site
  - make sure volunteer monitor brings his/her training packet and kit, if applicable, to the site
  - if you are loaning a monitoring kit to the monitor, bring this kit to leave with the monitor

*Texas Watch trainer Troy Henry conducts a Phase III training for Rodney Harris at Rodney’s site on Elm Creek in Rains County.*
Roles and Responsibilities for Phase III

Trainer

• Coordinate the scheduling of Phase III training events with each volunteer monitor.
• Complete each volunteer’s Training Packet, making sure to fill in back of packet with specific Phase III information on volunteer’s performance.
• Complete a Texas Watch Certificate request form for all monitors who complete Phase III training.
• Send Certificate Request Form and completed Training Packets to Texas Watch in Austin.

SITE ASSESSMENT

Another very important responsibility of a trainer is to perform a site assessment during a Phase III training event. First, the trainer should make sure the site is the one outlined in the volunteer’s Monitoring Plan. Once this is confirmed, the trainer should examine the site for a safe and representative location from which to sample. For instance, if the banks are very steep and a bridge or low water crossing provides safe access, a bucket grab from the middle of the stream may be the safest and most representative location at that site.

Representativeness is described as the degree to which data accurately and precisely represent an environmental condition. For example, a sample collected from the bank of a stream or in a riffle may or may not be representative of the stream environment as a whole. After the trainer has discussed with the monitor the most appropriate spot to monitor, the trainer should record a very detailed description of the sampling location at the site. This information should be recorded in the “Location” blank under Phase III on the front of the Training Packet. Feel free to write in the margins if more room is needed. For instance, “The sampling location for John Smith’s site #1 is from the bridge on F.M. 123 at Sloan Creek at mid-stream, 6 miles west of Newport in Orange County.”

If possible, a latitude and longitude recording from a Global Positioning System (GPS) also should be recorded. This information will be forwarded to Texas Watch along with the Training Packet, and will be valuable in assigning a unique site identification number in the TNRCC’s database.
EVALUATING OTHER TRAINERS
As a Certified Trainer, you may be asked to be present at Phase I and II training events to evaluate trainer trainees. The Certified Trainer’s responsibility at these events is to ensure the Training Coordinator and Mentor(s) are carrying out their responsibilities as previously described in this manual. As previously stated, training events are unique situations, and not every Phase I and II has to be conducted exactly the same way for them to be successful. People have different styles of teaching and logistics sometimes do not go as planned. There are, however, some very basic components of a successful training that must occur for a trainer trainee to have met his or her training requirements. They are as follows:

1. Each one of the variables must be fully explained and demonstrated to the volunteers prior to the volunteers conducting the tests, including the calibration of meters.
2. Each volunteer must perform each test on his own after it has been explained to him.
3. All volunteers and trainers present must wear appropriate safety gear when conducting the tests.
4. One Training Mentor must be present for every five volunteers at each Phase I and II training.
5. A maximum of two Training Coordinators may lead a Phase I and II training event.
6. The Training Coordinator must cover appropriate equipment care and maintenance as well as safety concerns of the equipment and chemicals.
7. All paperwork must be filled in appropriately.
8. A completed Training Session Attendance Form must be sent to Texas Watch in Austin.
9. The Training Coordinator must obtain known values from a calibrated Hydrolab or reliable test kit to compare with volunteer monitoring values.

MAINTAINING TRAINER CERTIFICATION
As stated earlier in this manual, you will be required to either lead or assist at least two Phase I and II volunteer monitor training events per year. This will assure that your training skills stay honed and that you stay informed of any changes in the Texas Watch training procedures.

Texas Watch greatly appreciates your taking the time to review this manual. It shows your willingness and dedication to provide quality training for volunteer monitors. Please do not hesitate to contact Anne Rogers, Texas Watch - Austin at (512) 239-4741 with any questions concerning this manual or Texas Watch trainer requirements. Welcome aboard!
VII. APPENDIX

Volunteer Monitor’s Training Packet
Volunteer Commitment Statement
Environmental Monitoring Form
Certificate Request Form
Trainer’s Evaluation Record
Training Session Attendance Form
TEXASWATCH Volunteer Monitor Training Packet

To become a certified water quality monitor:

STEP 1: Trainee must be an individual or member of a group that has a completed Monitoring Plan on file with TEXAS WATCH.

STEP 2: Trainee must use the TEXAS WATCH Volunteer Environmental Monitoring Manual, or other manual approved by TEXAS WATCH.

STEP 3: Trainee must successfully complete a three phase training program:
- Phase 1. Introduction to monitoring procedures
- Phase 2. Practice monitoring procedures at a field site
- Phase 3. Practice monitoring procedures at designated monitoring sites.

STEP 4: Trainee must successfully complete two quality assurance evaluations per year.

STEP 5: Trainee must commit to monitor at least one site for two years, monitor at least once per month, and report data monthly to TEXAS WATCH or other approved TEXAS WATCH data repository.

STEP 6: Trainee is certified as a Water Quality Monitor, and will receive a Certificate of Achievement from the Texas Natural Resource Conservation Commission, after this training packet is received by the TEXAS WATCH office in Austin.

Training Results for (volunteer’s name)________________________________________
Address ________________________________________________________________
City, State, Zip ___________________________________________________________
Day Phone _______________________________ Evening Phone ___________________
Monitoring Group Name ___________________________________________________

Phase 1 Training: Introduction to monitoring procedures
Location _______________________________ Date _____________________________
Trainer’s Name __________________________ Comments ______________________

Phase 2 Training: Monitoring in the field
Location _______________________________ Date _____________________________
Trainer’s Name __________________________ Comments ______________________

Phase 3 Training: Monitoring at Monitoring Plan location (comments on back)
Location _______________________________ Date _____________________________
Trainer’s Name __________________________

____________________________________________________is hereby certified as a water quality monitor.
(Print volunteer’s name)

(Signature of Phase 3 Trainer) ___________________________ (Date) _________

This training packet must include:
- One monitoring data form for each of the three training sessions signed and dated by the volunteer and the volunteer’s trainer.
- A signed and dated copy of the volunteer commitment statement, liability release, and equipment loan agreement (if applicable).

It is the responsibility of the volunteer monitor to keep this packet and bring it to each training session. The training packet should be left with the trainer after Phase 3 Training for sign off and comments. The trainer should then send the complete training packet to: TNRCC, Agriculture Division, TEXAS WATCH Program, P.O. Box 13087, Austin, TX 78711-3087.
## Training Results

<table>
<thead>
<tr>
<th>Variables Tested</th>
<th>Volunteer Values</th>
<th>Known Values*</th>
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### Phase 3 Training: Monitoring at Monitoring Plan location.

### Final Volunteer Evaluation:

- **Safety Performance:** 
- **Calibration(s):** 
- **Field Observations:** 
- **Sampling Procedures:** 
- **Testing Procedures:** 
- **Areas needing improvement:** 
- **Other Comments:**
Texas Watch Volunteer Commitment Statement

The following statement of commitment must be read and signed by each volunteer monitor as a condition of participation:

As a volunteer monitor working with Texas Watch, I commit myself to the collection of accurate, objective environmental information. The environmental information that I collect will be provided to Texas Watch as soon as possible after I collect it. I commit to monitoring the places, using procedures and timing that are specified in the approved Monitoring Plan. I agree that I will conduct my environmental monitoring in a safe way that will protect me and those people working with or near me. I also agree that I will obey all laws and not trespass on private property in order to collect my environmental monitoring data. If I must access private property to monitor my site, I will obtain written permission from the property owner and will furnish Texas Watch a copy of this document before I begin monitoring.

Signed: ___________________________ Date: __________________________

Liability

Texas Watch intends that volunteers participating in this program are not acting on behalf of the Texas Natural Resource Conservation Commission (TNRCC) or any Texas Watch Partner in any official capacity. As such, it is Texas Watch's intent that volunteers are not authorized to be considered agents, employees, or authorized representatives of the TNRCC or any Texas Watch Partner for any purpose, and that volunteers are not entitled to the same benefits received by employees of the TNRCC or any Texas Watch Partner.

Volunteers must recognize the potential for injury to themselves and their real and personal property which may result from volunteer activities conducted with Texas Watch's volunteer environmental monitoring program. The TNRCC and all Texas Watch Partners intend that volunteers expressly assume all risks and liability for any injuries to, or caused by, volunteers under this program.

Liability Release

In consideration of the foregoing, I, for myself, my heir, and executors do hereby release and discharge all TNRCC and Texas Watch supporting organizations for all claims, damages, demands, actions, and whatever in any manner arising or growing out of my participation in said monitoring program.

Signed: ___________________________ Date: __________________________

Equipment Loan Agreement

I, for myself, my heirs, and executors do hereby assume responsibility for the safety and care of all equipment, materials and supplies loaned or entrusted to me, and agree to transport, store and use such equipment, materials and/or supplies in a prudent and reasonable manner; to take such action as necessary to reduce the possibility of damage to, of or from such equipment, materials, and/or supplies. I agree upon verbal or written demand of the TNRCC, or their authorized delegate, to return said equipment, materials, and/or supplies within five days of such demand, to: Texas Watch, TNRCC, Agriculture & Rural Assistance Division, P. O. Box 13087, Austin, Texas 78711-3087.

Signed: ___________________________ Date: __________________________
Trainer’s Training and Evaluation Record

4 Phase Trainer Certification

Step 1: Trainer Trainee must be a Certified Water Quality Monitor.

Step 2: Trainee assists a Certified Trainer in planning, coordinating, and presenting at one volunteer monitors’ training session.

Step 3: Trainee plans, coordinates and presents one volunteer monitors’ Phase I & II training session assisted by a Certified Trainer. Completed Trainer’s form is on file with TEXAS WATCH.

Step 4: Trainer submits a TEXAS WATCH certificate request form for the new trainer to TEXAS WATCH. The new trainer receives a certificate as a Certified Trainer of Water Quality Monitors.

To Maintain Certification

Trainee must participate in at least two volunteer monitors’ training sessions per year and provide information on these training sessions to TEXAS WATCH.

*** If certification lapses, trainer will be required to repeat Trainer’s Training Steps 2 and 3.

TEXAS WATCH: 4 Phase Trainer Certification Record

Trainee Name: ____________________________________________

Organization: ____________________________________________

Address: _________________________________________________

City: ____________________________ Zip: __________________

Telephone #’s: Home: ____________________________ Work: ____________
Trainer Evaluation Record

I. Date Certified as Water Quality Monitor

II. Training Session Information (Assisting Phase)

   Name of Group(s) Being Trained:

   Location of Training Event:

   Trainee Evaluation

       Knowledge of Testing Procedures:

       Record Keeping:

       Areas Needing Improvement:

       Comments:

   Trainer's Name:

III. Training Session Information (Coordinating Phase)

   Name of Group(s) Being Trained:

   Location of Training Event:

   Trainee Evaluation

       Information Presentation:

       Knowledge of Testing Procedures:

       Logistical Coordination:

       Areas Needing Improvement:

       Comments:

   Trainer's Name:

_________________________
(Print Name)

_________________________
(Signature of Verifying Trainer)