Executive Summary

The Water-Wise Team program ran in the summer of 2004 and again in 2006. The 2006 Water-Wise Team was employed through the months of May 8th to August 25th. This year's goals were to:

- Raise the profile of water conservation in the District of Chetwynd
- Reduce outside and inside water use during the summer months
- Ensure residents understand the reasons why water conservation is important in Chetwynd
- Promote enthusiasm and fun into water conservation to further youth awareness
- Form partnerships with local businesses and organizations
- Educate residents about water meters in Chetwynd
- Enable all residents to see the link between water conservation and watershed management

The first task the Water-Wise Team had was preparing for elementary school presentations. At the beginning of June, elementary schools were visited and a water presentation was done for the students from kindergarten to grade 3. The presentation taught students to think about their water consumption and how they may help conserve our precious resource. By informing hundreds of elementary students, the Water-Wise Team hopes that the water saving message will spread throughout each individuals home.

The first Water-Wise week was proclaimed from July 1st-July 7th. The week was a great way to make Chetwynd citizens and businesses aware of the water conservation program. The week began with a successful kick-off barbeque followed by many events, such as: a colouring contest, tour of the water treatment facility, a radio call-in contest and an information booth as well as challenging the team to a game of mini-golf.

The main part of the Water-Wise Team's job was a door-to-door campaign. Mid-July through to August were spent campaigning neighborhoods, communicating water conservation awareness. All of the local businesses were also visited. This was a perfect opportunity to congratulate residents and businesses practicing water conservation techniques by entering them into a weekly draw.

During the course of the summer months the Water-Wise Team arranged to set up booths at local events. The booths usually consisted of a sign, a table, water conservation information, pictures representing what water conservation meant to elementary children and promotional material. We participated in two Farmer's Markets which were held on Sunday's at the Community Recreation Centre. In addition, we also took part in the Chetwynd Chamber of Commerce Trade Show and the community official planting day.





The media was a great way for the Water-Wise Team to spread the water saving message to the public. Through the radio and newspaper, the water conservation message was conveyed to the community. For example, every Wednesday morning at 9:15am we would be on-air with the morning host from the Peace FM radio station. Here upcoming events were discussed in addition to water saving tips. Another way the Team utilized the media to spread the message was to have four pre-recorded tips which ran daily on the local radio station. Overall, the radio coverage combined with many newspaper articles in both the Chetwynd Echo and Coffee Talk Express, helped the Water-Wise Team maintain consistent and on-going information to the public.

Throughout the past summer months there has been an abundance of fun and learning and we the Water-Wise Team of 2006 would like to wish all the best to any future Water-Wise program. Enjoy your read!





Education

Elementary School Presentations

During the month of June all three elementary schools located within District limits were visited. While at these schools, the Team made a presentation to students from kindergarten to grade 3. The presentation in its entirety took approximately thirty minutes and was mainly performed outside or in the school's multi-purpose room. By visiting over 350 students we feel we successfully spread the Water-Wise message to the children of the future and the parents of today.

The informative portion of the presentation began with an introduction to the program where we talked about some of the events we would be participating in throughout the summer. What it means to conserve water was discussed and through a visual poster the different stages the water must go through before it reaches our homes was shown. Samples of water drawn from the Pine River in Chetwynd were used to show what the water looked like as it travels through the different stages of cleaning. This was followed by a filter experiment which represented the water treatment process.

After the presentation a game called 'Carry the Jug' was played. Since children only have to turn on the tap to get water, they don't realize how much water they are using. However, if they had to carry all the water they needed maybe it would influence how much water they used. After the game was completed we concluded the presentation by having all the students take the water conservation pledge.







Once the presentation was completed activity booklets were handed out to each teacher to give to their students. These booklets contained fun games and exercises that the students could do while learning about water conservation. Evaluation forms were also handed out to each teacher. This was used to get feedback on how to improve the presentation. Fortunately, most feedback was congratulatory.





As the different schools were visited, each student was asked to draw a picture portraying what water conservation meant to them. The number of pictures we received was awesome! The drawings were later used to pin up onto an A-frame which was on display during Water-Wise Week, at our booths, as well as on the water conservation float in the Canada Day Parade. During each presentation we kept track of which classes were the most enthusiastic and who we felt got the most out of the presentation. Once all the presentations were complete a class 'pizza party' was awarded to the most enthusiastic class. This was sponsored by one of the local pizza parlors.



Tara Holland and Vanessa Herman joined by Madam Morgret's class who won the pizza party for 'the most enthusiastic class' during the school presentations.

Recreation Centre Summer Day Camp

A presentation for the summer preschool program at the Recreation Centre was also given. Here it was learned that there is no age limit on when children can start to learn about how to conserve water. Through a story about how water is used, the importance of water conservation was emphasized. The water filter demonstration was also done and the presentation concluded with everyone taking the pledge to conserve water.

For the older day camp, children aged 6-10 learned about the water cycle and water conservation. This was done through a song called 'The Water Cycle Boogie' which was sung to the tune of 'Skip to my Lou.' The song involved an activity where children would make a bracelet, adding on beads of varying colours which represented each part of the water cycle. Learning about where our water comes and the process required to deliver water to our homes, helped to reinforce water conservation.





Water-Wise Week

The Water-Wise Team held the first Water-Wise Week from July 1st-July 7th. Before Water-Wise Week could be declared, Mayor Saugstad had to proclaim it. Water-Wise week was a great opportunity for the Team to raise public awareness about the program and water usage. Each day throughout Water-Wise week was sponsored by at least one local business. This was a great way for businesses to get involved in the program. The week was advertised through posters displayed around town, formal invitations and local media.



Tara Holland and Vanessa Herman join Mayor Saugstad as he signs the proclamation for Water-Wise Week

A barbeque was held on July 1st to kick off Water-Wise Week. Through the generous donation from Super Valu, the Team gave out free hotdogs and pop. Although this event was open to the public the Mayor, Council members, and the District of Chetwynd employees were officially invited.



Vanessa Herman, Miranda Maineau and Tara Holland at the kick-off barbeque.





On Sunday of Water-Wise Week a kick-ball tournament was held which was open to the public. This event was sponsored by Valley Pure Water who donated a water cooler and water as well as Wildcat Video who donated movie rental coupons for everyone who participated. Before everyone stepped up to kick the ball, they had to share a Water-Wise tip with the crowd.

On Monday, there was a colouring contest for children of all ages to enter. The contest was printed in the local newspaper and copies were available at the District Office as well as at some of our sponsor locations. A winner from each age category was chosen. The winners ranged in age from 3-15 years old and each received a bag with Water-Wise promotional materials as well as prizes donated from local sponsors. However, everyone who entered received movie rental coupons donated by WildcatVideo.

On Tuesday two tours of Chetwynd's Water Treatment plant were offered. The event was sponsored by the District of Chetwynd who was to provide transportation from the Recreation Centre to the facility and IGA donated cases of bottled water. We felt this would be a good opportunity for the residents of Chetwynd to see the treatment the water goes through. Unfortunately, due to the emergency evacuation of Tumbler Ridge, this event had to be cancelled

On Wednesday we had our on-air show with Peace FM. On this show the success of the previous events was discussed as well as the upcoming events. A phone-in-contest was held where listeners were asked to call in and answer a question related to water conservation. The winner was awarded a prize pack filled with goodies donated from businesses that sponsored Water-Wise week. In the afternoon a booth was set up downtown. At the booth promotional materials and information about water conservation was handed out. Samples of water drawn from the Pine River and a poster of the water treatment process was on display along with pictures showing what water conservation meant to children in the community. A draw was also held where people had to write down their best water saving tip for a chance to win a prize pack. There was a constant flow of people stopping by the booth throughout the day and many commented that the program was beneficial.



The Water-Wise team at a booth set up downtown.





On Thursday everyone was invited to bring out their golf skills and best Water-Wise tips by challenging the Water-Wise team to a round of mini-golf. This event was sponsored by the District of Chetwynd. After everyone finished their game freezies were handed out which were donated from Fields. Over 50 people come out for this event and before they could golf they had to tell us their best Water-Wise tip.

On Friday the winners of the colouring contest were announced. There were ten winners, but everyone who entered received a prize. All the colouring sheets were displayed at the leisure pool for everyone to see.



Tara Holland and Vanessa Herman with a few of the winners of the colouring contest.

At the end of the week thank you cards were delivered to all of the businesses who donated prizes and sponsored different events. This was a perfect way to acknowledge sponsors who participated in the program.





Door-to-Door Campaign

The door-to-door campaign began in the middle of July. Emphasis was based on promoting water conservation awareness. During the campaign, all the homes and businesses located within the District boundaries were visited. Packages with promotional materials that included messages on how to conserve water, watershed management and water meters were handed out. Everyone we visited was asked if they practice water conservation and if so, how they did it. We used this opportunity to congratulate the residents practicing water conservation techniques by entering their names into our weekly draw. The draws were held every Wednesday at 9:15am on Peace FM where winners were awarded Water-Wise prize packs. We are pleased to say there were many entries. Residents and business owners were also given the opportunity to ask questions or address concerns they had. Most questions and concerns related to the installation and purpose of water meters.



The Water-Wise Team visiting resident Elaine Davis and handing out water conservation material.

Throughout the campaign over 600 homes were visited. At homes where no one was available door hangers were left. These homes were visited three times before an information bag was left on the door. As for businesses, there were approximately 200. The same information was handed out to the businesses with the addition of an information sheet geared specifically for commercial water use, which we created.





Miscellaneous Projects

Trade Show

From May 12th-14th the annual Chetwynd Chamber of Commerce Trade Show was held. The trade show gives local businesses and organizations an opportunity to publicly display what they have to offer. This was a perfect introduction to the Water-Wise Team where information about water shed management and water conservation was on display and handed out. The booth was shared with Terasen who had a water meter on display for everyone to see. This was they were able to answer any questions or concerns regarding water meters. An early bird sign up sheet for residents and businesses to have their water meters installed was also available. Over the weekend approximately 60 people signed up. Those names were then entered into a raffle to win a gift certificate to a local restaurant or store of their choice, as well as a golf shirt and jacket.

Council Speeches

In order to keep Council informed with what our program was involved in throughout the summer, we decided to make a presentation at two council meetings. The first was used as an introduction to our program where we took the opportunity to inform Council about our goals and objectives in addition to some of the events we planned on running throughout the summer. This way if they were approached in the community with questions related to the program, they had some background information on it. The second presentation was a conclusion to the program where all the programs accomplishments were highlighted. This was also an opportunity for Council to provide feedback on the programs overall success.

Official Planting Day

At the beginning of the summer, the Economic Development Committee (EDC) held its annual official planting day where people in the community donate a plant to the community garden. This was an opportunity to educate avid gardeners about water efficient gardens. A list of trees, shrubs, perennials, annuals and bulbs which are specific to this area, are water efficient and available locally was available. A brochure, which we put together, on Xeriscape gardening was also on display. The brochures followed the same principles as Xeriscape landscaping but were modified to apply specifically to gardening in the North.

Water-Wise Gardens

To participate in 'Communities Bloom' the Water-Wise Team planted two Water-Wise Demonstration Gardens. Plants which required less watering and weeding, and are specific to this area, were chosen. A soil which contained water gel that helps to retain





moisture was selected. The beds were covered in mulch to prevent erosion, even out the soil temperature and improve the quality. We wanted people to see that by choosing water efficient plants they can not only save money but can also create a low maintenance garden. Throughout the summer the gardens were watered five times and a total of four minutes was spent weeding!



Councilor Roberts helps the Water-Wise Team plant two Water-Wise gardens.

The Water-Wise demonstration garden.

Parades

The Water-Wise team had the opportunity to participate in two parades. The first was the Annual Chetwynd Canada Day Parade where we entered a float. This was a great opportunity to familiarize the community with us as the Water-Wise Team and the water conservation program. Our float was a pick-up truck covered in Canadian flags, which also displayed our Water-Wise Week sign and all of the pictures drawn by the elementary students representing what water conservation meant to them. To our surprise we won second place for originality!





Tara Holland and Vanessa Herman pose by their Water-Wise float.

Some of the pictures drawn by elementary students.





The second parade we participated in was the Annual Exhibition and Rodeo Parade held in Dawson Creek. This was a good opportunity to display our program to one of our neighboring communities. We joined Councilor Roberts on the District of Chetwynd float. This turned out to be a great day and we were glad that we participated and were able to share in the fun.



Councilor Roberts, Tara Holland and Vanessa Herman pose with one of the chainsaw carvings on the float at the Annual Exhibition and Rodeo Parade held in Dawson Creek..

Water-Wise Challenges

Two Water-Wise challenges were held throughout the summer which were geared towards children. They were advertised in the local newspapers and were also available at sponsor locations. Each challenge consisted of two separate weekly competitions which included ten water-saving statements, one of which was incorrect. Children who correctly indicated which statement was NOT Water-Wise were entered into a draw. Larger prizes were presented to five children per challenge. However, all entrants received a small prize pack. Nine local businesses sponsored the Challenges. Some of the prizes awarded included a gift certificate to Future Shop, binoculars, 3-D kite and a watch.



Tara Holland and Vanessa Herman pose with two of the Water-Wise winners Amy Beattie and Kayla Sanford.





At the end of the Challenges we delivered thank you cards to all of the businesses who donated prizes to present to the winners. Their logos were also included on the challenges and recognized through the media. This was a perfect way to acknowledge all of the businesses for their support.

Farmer's Market

On two occasions an information booth was set up at the Farmer's Market held on each Sunday throughout the summer. Again, this was another opportunity to interact with the public to let them know who we were and what our program involved. Information packages and promotional material were given out to anyone interested. We had a draw box on hand and to qualify, people had to write down their best water saving tip.

Rain Barrel Program

At the end of July we proposed that the District implement a rain barrel rebate program similar to the existing compost program. This was a great opportunity to give residents an incentive to conserve water. The idea came during our door-to-door campaign when numerous residents asked if there was a program similar to the compost program already in place. Since it was such a common question, we thought it would be a great addition for the community and we would propose it to the District.

A presentation was made to the Community Improvements Committee asking if they would oversee the project. The idea was approved and moved to the District of Chetwynd Council meeting. The Community Improvements Committee also suggested that the Peace River Regional District be on board to include residents who live outside of the District limits. To date only the District of Chetwynd Council has approved the program. It was decided that the program would consist of a rebate of \$25 per rain barrel up to a maximum of two rain barrels.





Media

Radio

Once a week, an on-air show was done with Peace FM, the local radio station. Each show consisted of weekly progress, upcoming events and an elaboration of the daily tips. This is where the weekly draw from the door-to-door campaign was held. On occasion call-in contests were run where we would ask listeners a question related to water conservation. Listeners who called in with the correct answer would be awarded prizes. This segment would usually last ten minutes and would be aired each Wednesday at 9:15am.

Four pre-recorded tips were also run on Peace FM daily which ensured regular and consistent messaging. Each week the tips would change and rotated between indoor and outdoor. We had a total of forty-four tips run over the summer. Copies of these are available on CD in the file folder.



Vanessa Herman and Tara Holland in the recording studio at Peace FM with the morning host Sadie Hesketh.

Newspaper

Throughout the duration of the program a water conservation corner was featured in the Chetwynd Echo. Each edition included four water saving tips which coincided with the pre-recorded tips that ran on Peace FM. Beneath the tips there was a write-up listing some of our upcoming events, thank-you's to sponsors, and frequent questions we were asked during our door-to-door campaign, etc. Copies of all the conservation corners are on file





Both the Chetwynd Echo and Coffee Talk Express published articles which included asking residents to watch their water usage and an introduction to the program. Both papers had weekly coverage of events as well as photos. Some of these included the winners of our colouring contest and Water-Wise challenges.

Billboard

Regular water conservation messages ran on the electronic billboard at the Recreation Centre. These tips rotated each week and ran for the duration of the summer.





Feedback

Throughout the program constant feedback from the public was received. For the most part all of it was positive.

Teacher Survey

The surveys which were handed out to the teachers during the elementary school presentations were one source of feedback. Some of the comments included: "Good job," "Good pacing and variety of activities," "Presenters held their attention and the water activity helped to reinforce usage ideas," "Lots of good information and excellent management," "Very organized and the presenters had a real interest in their presentation." Suggestions for improvement were that instead of awarding a few prizes to students who shared water saving tips, everyone or no one should have received them. One teacher also suggested the option of a field trip to the water treatment plant.

Door-To-Door Campaign

During the door-to-door campaign questions and concerns residents and businesses had with regards to the program were recorded. Overall most were impressed with the progress we had made and felt it was about time that a program similar to this be put in place. Some of the comments included: "I read the conservation corner each week and practice the tips," "You girls are doing a great job, I'm thrilled with the program," "I already have/I plan on installing low-flow devices in my home," "It's about time we have water meters installed." In addition when we asked each resident or business owner if they had seen or heard about the program the majority said they had.

Most questions focused on the water meters and included: "When will they begin installation?", "Where will they be installed?", "What will the rates be, will I be paying more?" Perhaps a handout outlining the approach to the meters would have been useful. This would have helped to alleviate concerns residents may have had with respect to the meter installation and water rates. Some of the other questions included: "Does the District have a plan for providing an adequate water supply for new developments such as subdivisions and hotels?" and "Is there a program for rain barrels similar to the existing compost program?" For the most part we were able to answer people's questions or concerns and if not we would re-direct them to someone who could.





Below are a list of questions we asked three people at random through a phone call. Each individual was visited during the door-to-door campaign. Their responses are included below:

1. Approximately how many times did you see or hear of the Water-Wise Team throughout the summer (May-August)?

First: Saw us in the paper once but was out of town for the majority of the summer

Second: Three times

Third: Five or six times in the Chetwynd Echo and in the Coffee Talk Express

2. If you can recall, on a scale of 1-10 how conscious of your water-use were you prior to the implementation of the Water Conservation Program?

First: 9, Very conscious

Second: 6 Third: 8

3. On a scale of 1-10, how conscious of your water-use are you after hearing about and being visited by the Water-Wise team?

First: 10, More conscious after receiving water conservation information. Action was taken after a team member recommended fixing their leaky tap and to place a bucket beneath it to catch the dripping water until fixed

Second: 6.1 Third: 9

4. On a scale of 1-10, how well do you feel the Water-Wise Team conveyed the message of water conservation and answered any questions you may have had?

First: 9, Was very impressed with the team member who visited them during the door-to-door campaign. Thought they were very friendly.

Second: 7 Third: 8

5. Do you feel the program should run again in the future?

First: Yes, there are still a lot of people who waste water

Second: Yes **Third:** Yes

6. Do you have any additional comments (positive or negative)?

First: Glad that water meters are being installed, feels people should pay for the amount of water they use

Second: Wants to know why there is a restriction on water use and if the District has any future plans of changing that





Third: Thought we should have had a booth at the trade show. We informed them that we did.

Media

Since we had such a good rapport with Peace FM, we asked Sadie, the morning host, to write us an evaluation letter:

To whom it may concern,

During the time that I have had the pleasure of working with Tara and Vanessa of the Chetwynd Water Wise Team, I have watched interest and awareness throughout the community increase immensely. I have especially seen a huge awareness in the younger members of our community. This, I feel is the right track. If the children are learning not to waste water, or take our natural resources for granted, then the chances for our community to thrive are increased. Tara and Vanessa have had a tremendous impact on the community of Chetwynd, and even bringing the excitement to Dawson Creek with the parade and such. It has been a wonderful program during a season which has proven to be incredibly arid, therefore water conservation has been a key factor in helping our community this summer. I am proud to say that I, (even if it was minimal) was a part of this wonderful campaign to help better my community.

Thank-you, Sadie Hesketh

We also asked Wendy Hooey from the Chetwynd Echo for her feedback. Wendy felt we had done a fantastic job conveying the message about water conservation and found it to be a pleasurable experience working with us. She hopes to see the program run again in the future. However, she was curious to know the impact the program had and if water usage within the District had decreased compared to previous years, especially since this summer was very dry. Unfortunately there was no way of accessing this information because variables between the years were great and therefore comparison was not possible.





Our Perspective on the Program

Vanessa Herman

I am writing this letter to give my perspective of the water conservation program in the District of Chetwynd for the summer of 2006.

Over the summer I have learned a lot about water conservation and many other new skills, including how to write ads & articles for the newspaper as well as how to do them on a radio station. I have also learned the importance of a positive working environment. I have had the opportunity to work with a lot of wonderful people who have not only taught me about things I never knew, but have also given me support with my own idea's and projects. This made me look forward to my job every day!

I really feel that the water conservation program in Chetwynd was a great program; that the community needed to help understand the meaning of water conservation as well as the importance of it. It was also really nice to have someone tell me when I was at their door, that they were really glad such a program was in place and that Tara and I were doing a great job. I also really feel that the program did have a positive impact on the community. I know that many of the children we visited at the schools at the beginning of the summer actively conserve water in whatever way they can, and remind their parents to do so as well. Whenever we have seen these children around town, they have felt obligated to approach us and tell us all the ways they are saving water. What a rewarding job this has been!

There were a few items however, that would have helped to make our program run a little more smoothly, such as having an office space of our own, having enough of the updated material to be handed out to the public and having an accurate list of all the homes to be visited ready for us. I know that office space is very limited here and that the District did the best they could, but if they are planning on running the program again in a few years that might give them enough time to come up with a solution. Having an office space of our own would have helped us to do our job more efficiently and would have been more convenient for the staff whose offices we would borrow. We had a little extra stress when a few weeks before the end the program we ran out of the information sheets we were to hand out, and then had to find the original digital copy to have more printed. Having all the material ready for us to go at the beginning of the program would have saved us time and would have given us more time to re-visit missed homes. We also found that the map of town given to us for the door to door campaign was not completely accurate at times and did not include all of the houses on town water. There were a few houses on town water that were outside the District boundary. Having an updated list of homes would have helped us with any confusion we had with the map, and also having them all on a list would make sure that none are missed (especially the homes that only the employees who have worked at the District for a very long time know about). These are my suggestions to help the next Water-Wise Team.

Over all I really enjoyed my job here, and the fact that I got to learn so many new skills that I know I will be able to use in my future jobs or career. I would like to say thank you for the opportunity of being part of the Water-Wise Team; I had a great summer!





Tara Holland

I would like to thank you for the opportunity to work on this program as the Team Leader of the Water Conservation Program in Chetwynd. I am pleased to say that this summer has been a positive learning experience for me. I have had the opportunity to work with a lot of great people who were each able to teach me something new. I learned a great deal about the water treatment process, water conservation, and interacting with the public in person, through written newspaper articles, and through airing ads on the radio.

Not only has the program been a positive learning experience for me, it has been a lot of fun. When I first started I was told "the program will be what you make of it." That was so true. It was nice to have the freedom to enhance this program beyond the basic parameters. I think because our program was so flexible we were able to come up with a lot of great ideas. I am proud they were our own ideas, that made us much more dedicated to ensuring there success.

I feel we were successful in informing the residents and businesses of Chetwynd about the need to conserve water and about their own personal water usage.

Once again it has been a great summer and I couldn't have asked for better people to work with. Best of luck in the future.





Appendix A





Teacher Notification





Elementary School Presentation:

A Water-Wise Education Opportunity

The District of Chetwynd Water-Wise Team is offering an entertaining and interactive presentation about water conservation issues to primary students in Chetwynd.

Information:

- The Water-Wise Team is a group of two university students who have developed a program with the goal of educating Chetwynd citizens about water conservation, as well as, the District's water system.
- The presentation is fun, visual and informative and also includes an interactive outdoor activity.
- The presentation is aimed at primary grades (K-3) and is approximately 30 minutes long, with slight fluctuations depending on classroom participation.
- The use of a multipurpose room or library would be greatly appreciated. This would save time by eliminating transitional delays associated with setting up.

There is an outline of the presentation attached for your review. If you have any questions or comments, please contact us at:

The District of Chetwynd

PO Box 357 5400 North Access Road Chetwynd, BC V0C 1J0 Tel: (250) 401-4100

Email: tarah@gochetwynd.com





Water-Wise Presentation Outline

I. Introduction of Team Members

- Information about the Chetwynd Water-Wise Team

II. Discussion

- What does it mean to conserve water?
- Where does our water supply come from?
- Why should we conserve water?

III. Water Filter Demonstration

- Simulates how water is filtered at the water treatment plant

IV. Game "Carry the jug"

- Objective is for students to recognize that their actions directly affect how much water they use

V. Booklet

- The Water-Wise Team will handout to each student an exiting Water-Wise activity booklet

VI. Assignment

The Water-Wise Team will ask every student to draw a picture of what they learned or enjoyed during our presentation. This gives them an opportunity to artistically illustrate meaningful water conservation messages. We can then come by the school and pick up the pictures so we can create a scrapbook for them. The students can then visit the Water-Wise Team at various community events, like Water-Wise Week, where the Team will have their pictures on display so they can show their parents





Teacher Survey

Water-Wise Educational Program





Thank you for choosing the Water-Wise Team! We would like to hear your opinions on the quality and the effectiveness of our Water-Wise Educational Program that we presented to your students. We would be very appreciative of any suggestions you might have that would enhance the overall effectiveness of our classroom presentation. For the sake of confidentiality, we do not require you to provide your name for this survey.

What strengths did	d the Water-Wise	Educational Progra	am display?		
What weakness di	d the Water-Wise	Educational Progr	am display?		
Do you have any o	other suggestions	for improvement?			
Please rate the Wa	ter-Wise Education	onal Program based	d on the following	criteria. (1 = poo	or, $5 = \text{excellent}$)
Was the content or	n water conservati	ion comprehensive	and informative?		
1	2	3	4	5	
Did our education	al program grab st	tudent's interest?			
1	2	3	4	5	
Was our program	fun and interactive	e for the students?			
1	2	3	4	5	
Was the information	on appropriate for	the grade of your	students? (K-3)?		
1	2	3	4	5	
	Thank vo	ou for taking the t	ime to fill out thi	c survey	





Activity: Carry the Jug

Objective:

Students will recognize that their actions directly affect how much water they use.

Materials:

2 large trash cans (15 to 30 gallons works well) several sand pails of various sizes signs "Home" and "Supply" large open space water (or for a less wet or indoor approach you can simulate water by using packing peanuts, confetti, or a similar filler material)

Introduction:

Because students only have to turn on the tap to get water, they do not realize how much water they are using. What if they had to carry all the water that they needed? Would it influence how much water they use?

This is a team project. The students want to make the water in their supply last as long as possible. The less water a particular activity takes, the longer they will get to play the game. It is also important not to spill the water – spilled water that does not make it to the home will have to be replaced.

Procedure:

- 1. Photocopy the list of activities on the next page and make cards to draw out of a hat.
- *On a few of the activities we put stickers. The cards with stickers indicated lowwater use activities.
- 2. Set up a large trashcan filled with water (or alternative) on one end of a field; mark it "supply." Set the same sized trashcan at the other end but leave it empty and mark it "home."
- 3. Determine a chart that will show how many sand pails correspond to each activity. For example, watering the lawn requires eight large buckets whereas flushing the toilet only requires two small buckets. For the low-water use activities the amount of water required is cut in half.
- 4. Have a student draw a card from the hat.
- 5. Using the sand pails or similar containers, students must move the amount of water on the card from the "supply" to their "home." Keep the amounts small enough for the student to move, but large enough that they understand the difficulties associated with moving water.

NOTE: When finished with the water use it to irrigate landscapes around the school.





Activity: Carry the Jug Activity Cards

Flush the toilet	Flush the toilet
Flush the toilet	Flush the toilet
Take a shower	Flush the toilet
Wash a load of laundry	Take a shower
Brush your teeth	Brush your teeth
Wash dishes	Brush your teeth
Wash dishes	Clean sidewalk using water out of a garden hose
Wash car using water out of a garden hose	Wash hands
Water lawn	Wash hands
Water the flowers	Wash hands





Water Conservation Pledge

I pledge to save water, to treat it with care, never to waste it, I wouldn't dare! I will not pollute it. I won't hesitate to tell other people of water's sad state. I pledge to conserve every drop that I can every day of the week. That is my plan!

We wrote this up on a large poster board and had the children repeat each line after us.

Retrieved from the Santa Clara Valley Water District Website: http://www.valleywater.org/For_Teachers_and_Students/Teaching_materials/Water_conservation_pledge.shtm:





Preschool Presentation

A Story About How We Use Our Water

Materials

Name tags and script
Eight plastic drinking cups
Medium plastic container (able to hold five cups)
Large plastic container (able to hold ten cups)
Large bucket filled with water

Script

Once upon a time, there was a clearing in the woods with a creek running through it. Lots of plants grew by the creek and got their water from it. Deer came there to drink, birds came there to take their baths and fish swam in the creek.

Plants and animals tag, 1 cup of water

This cup of water represents how much water the plants, deer, birds, and fish used each day.

One day a family of people came to the creek. "This looks like a great place to live" they said. The family set up a camp and later built a house there. They took water from the creek every day to drink, bathe and wash their clothes.

Family tag, 1 cup of water

This cup of water represents the amount of water the family used every day for drinking, bathing and washing.

One day a farmer came to the houses around the little creek. She decided that she wanted to grow tomatoes in the field by the houses. She hauled bucketfuls of water from the creek to water her tomatoes every day.

Farmer Tag, 5 cups of water into medium container

This container of water represents how much water she needed to water her tomatoes every day in the summer.

More people heard about what a great place this was to live. A builder came up and built a subdivision for four families there. Four families came and moved into the new buildings. They all used water from the creek for drinking, bathing, and washing things.

Family Tags, 2 families get 1 cup of water, 2 families get 2 cups of water





These cups of water represent how much water their families used everyday.

Soon after the subdivision was built, a company that made paper came into town. The people in charge of the company built a big factory and began making paper for the people of the town and for others. Many people in the town got new jobs working at the paper company.

Company Tag, 10 cups of water into large container

To begin with, the company was using 20 cups of water every day. After a while, they couldn't get enough water from the creek to supply 20 cups a day. So they reused some of their wastewater, and cut back to 10 cups of water per day.

Now the town had many houses, a paper company and a farm. Each of these used water from the creek. There were still plants, deer, birds and fish that used the water too. As more and more people needed water from the creek, less and less was available. It was important that everyone worked together to try to not waste the water, otherwise the creek would eventually run out.

Questions:

- 1. Did everybody in this community use the same amount of water? *No*
- 2. Who used the most water? *The paper company (10 cups)*
- 3. Who used the smallest amount of water? *One family or the plants, deer, birds and fish*
- 4. What happened when more people, farms, and companies moved into the town? *They needed more water*





Appendix B





Water-Wise Week Proclamation





Proclamation

"Water-Wise Week"

July 1 - 7, 2006

WHEREAS it is important to improve the understanding of both children and

adults about water conservation in Chetwynd;

AND WHEREAS the Water-Wise Team provides an interactive program that both

children and adults can enjoy while learning ways to save water,

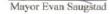
and why it is important to do so;

AND WHEREAS water is one of Chetwynd's most essential resources and must be

conserved as much as possible.

I, Evan Saugstad, Mayor of the District of Chetwynd, do hereby proclaim the week of July $1^{\rm st}$ - July $7^{\rm th}$ 2006 as "Water-Wise THEREFORE

Week."







Sponsor Request for Support





Date

PO Box 363 Chetwynd, BC V0C 1J0 (250) 788-9577

Dear (Potential Sponsor),

The Water-Wise Team will be proclaiming Water-Wise Week from July 1st to the 7th. We are seeking the support of your business through the donation of (blank). Your business' name or logo will be acknowledged as a sponsor at the event. We will also acknowledge your support through local media.

The Water-Wise Team, which is funded in partnership with Urban Systems and the District of Chetwynd, focuses on educating the residence and business' of Chetwynd about the present water systems and water conservation issues in the District of Chetwynd. Water-Wise week is one of many ways we plan on increasing public awareness of our program and water conservation in general.

We would greatly appreciate any contribution you could supply to ensure the success of this aspect of our program. Thank you for your consideration and possible involvement in making our Water-Wise Program a success. Please contact us at (250) 401-4100 or via email at tarah@gochetwynd.com if you have any further questions.

Sincerely,

Tara Holland and Vanessa Herman Water-Wise Team, 2006









Saturday, July 1st

Canada Day Parade & Kick-off to Water-Wise Week. Meet us after the parade at the pool for a hotdog sponsored by Super Valu.

Sunday, July 2nd

Kick Ball for everyone! Please meet us outside the pool at 1:00pm. Thanks to Wildcat for sponsoring this event.

Monday, July 3rd

Water-Wise colouring contest. Prizes will be awarded. Colouring sheets are available at our sponsors: Wildcat, the Echo and the District Office.

Tuesday, July 4th

Have you ever toured the water treatment plant? Now is your chance! We will be offering two tours: 10:00am and 1:00pm. Meet us at the Rec Centre where we will have transportation available but space is limited so make sure you arrive on time! Thank you IGA for your donation.

Wednesday, July 5th

Tune into Peace FM at 9:15am and listen to our on-air show. Tell us how you conserve water and share your tips for a chance to win prizes. We will also have a booth set up downtown from 12:00pm-2:00pm where you can also enter to win. Thank you Fields for the donation of freezies.



Thursday, July 6th

Bring out your golf skills and best Water-Wise tips by challenging the Water-Wise team to a round of Mini Golf. **Everyone is invited but you must bring a Water-Wise tip on paper.** Meet us at the Marketplace between 11:00am-3:00pm. Thanks to the District of Chetwynd for sponsoring this event and Valley Pure Water for the donation of bottled water.

Friday, July 7th

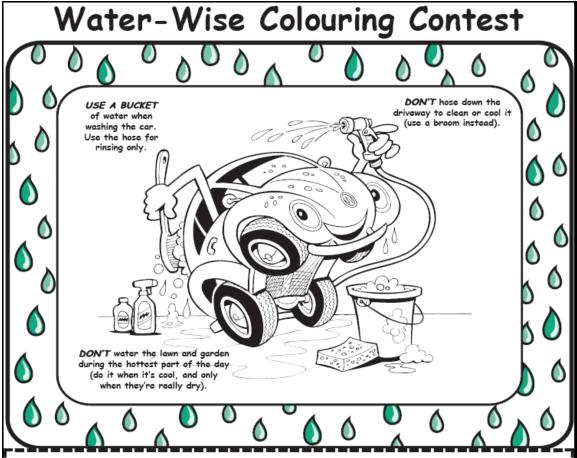
The winner of the colouring contest will be announced so make sure you have handed in your entries back to the participating sponsors.



*Modified to fit into report







N	а	m	e
14	а		

Age

Phone

Drop off at Wildcat Video, the Chetwynd Echo, or the District Office. Extra copies of entry form can be picked up at the District Office. All entries will be displayed at the District Office and Rec Centre. Contest closes July 6, 2006.





Appendix C





Water Conservation Poster – General

DISTRICT OF CHETWYND



Water was not much of an issue for Little Giant until he got the big scare that we all did in 2000, the Pine River oil spill happened. Since then, Little Giant has taken water much more seriously and been careful to conserve water, while the District has dedicated considerable resources to fixing the water system. Today, Little Giant and the District of Chetwynd are asking you to be water wise.

WHY CONSERVE WATER?

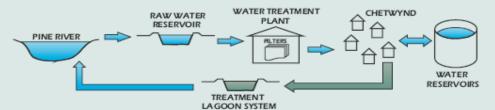
Because the average person in Chetwynd uses almost twice the water per day that the average Canadian does.



Because water is a precious resource that we all need to work together to conserve.

HOW DOES CHETWYND'S WATER SYSTEM WORK?

Follow the journey of the water from the river to your house and back again.



HOW DO I CONSERVE WATER?

BATHROOM (35% of household use)

Purchase and install low flow toilet, shower, and faucet fixtures.
Reduce your shower to 5 minutes.
Plug the buthtub before suming the water on, then adjust the temperature as the tub fills up.
Tum off the water while you shave, brush your teeth, and wash your

Turn faucets off tightly after each use.

from fath, each majory and construction. Check faucets and pipes for leaks. Check the toilet for leaks by putting a few drops of food coloring in the ink. Color in the bowl means that there is a leak. Place plastic bottles filled with sand in your toilet tank.

When buying a new washing machine, choose the water and energy-efficient model. Run your washing machine only when you have a full load, or be sure to adjust the load size.

KITCHEN (5% of household use)

Use garbage disposal sparingly-it requires a lot of water to operate.
When washing dishes by hand, don't let the water run while riruing.
Soak your pots and pans instead of letting the water run while you

Soak your pots and parts instead of letting the water run white you scrape them clean.

Wash vegetables and fruit with a vegetable brush and a basin of water rather than under running water.

Recue water that vegetables are washed in for watering houseplants.

Run your dishwasher only when it is full install flow restrictors and aerators in faucest.

Keep a container of water in the fridge.

Don't use running water to their flood.

O'STRICTO CHETWYND

Listen to the weather forecasts. This way you can choose not to water the lawn when it is going to rain.

Use a screwdriver as a probe to test soil moisture. If it goes in easily,

Use a screwdriver as a probe to test sort monaum.

Water in the evening or early in the moming to reduce evaporation.
Most favors need only an inch of water per week to stay healthy. Use a shallow can to measure this amount.

Adjust sprinklers so only the lawn is watered, not the house, sidewalk, or street. Do not water on a windy day.

Collect rain water in a barrel and use it to water your garden. Use much to reduce evaporation.
Acrate your favor periodically.
When movining leave the grass at least three inches high. Closely-cut grass makes the roots work hander, requiring more water.
Water trees slowly, deeply, and infrequently so encourage deep rooting.

rooting.
Plant native species and water-efficient grasses, plants, trees, and

DRIVEWAY 15% of hor

Use a broom when cleaning the driveway.

When washing whicles, use soap and water from a bucket. Use a hose with a shut-off nozzle for the final rinse.







Water Conservation Poster - Indoors

DISTRICT OF CHETWYND CONSFRUATION PR Chetwayer-wis Hang this poster on the fridge or somewhere else in the house, then follow the tips below to help conserve water.



INDOOR WATER WISE TIPS IN



BATHROOM (35% of household use)

- Purchase and install low flow toilet shower, and faucet fixtures.
- Reduce your shower to 5 minutes.
- Plug the bathtub before turning the water on, then adjust the temperature as the tub fills up.
- Turn off the water while you shave, brush your teeth, and was h
- Turn faucets off tightly after each use.
- Check faucets and pipes for leaks.
- Check the toilet for leaks by putting a few drops of food coloring in the tank. Color in the bowl means that there is a leak.
- Place plastic bottles filled with sand in
- △ LAUNDRY (10% of household use)
 - When buying a new washing machine, choose the water and energy-efficient model.
 - Run your was hing machine only when you have a full load, or be sure to a djust the load size.

KITCHEN (5% of household use)

- Use garbage disposal sparingly it requires a lot of water to
- When washing dishes by hand, don't let the water run while rinsing.
- 🌢 Soak your pots and pans instead of letting 🥤 the water run while you scrape them clean.
- Wash vegetables and fruit with a vegetable brush and a basin of water rather than under running water.
- Reuse water that vegetables are washed in for watering houseplants.
- Run your dishwasher only when it is full.
- Install flow restrictors and aerators in faucets.
- Keep a container of water in the fridge.
- Don't use running water to thaw food









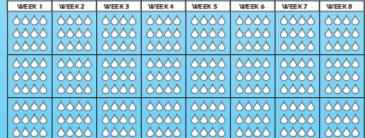
How Water-Wise are you?

For every tip you follow during the week, fill in one water drop below.

BATHROOM

LAUNDRY

KITCHEN







Water Conservation Poster - Outdoors







THE BUSINESS OF WATER-WISE

Water is a resource we often take for granted. Canadians are among the highest per capita users of water in the world. Here in the District of Chetwynd we use twice the amount of water as the average Canadian.



While households use the majority of (70%),overall commercial operations and office buildings account for the remaining 30% of all water use. The purpose of this fact sheet is to help all commercial operations and office within buildings the District Chetwynd to reduce their water consumption.



Whether or not your organization is a tenant or landlord you can make a difference by reducing water waste. Everyone working together doing their part saves water, energy, money, and the environment.



Nature is not a free flowing tap!

Here are some of the many ways water is used in this environment and a few economical solutions that are easy to do.

- The largest water user in both the commercial operations and homes is the toilet. Standard toilets use about 22 litres every time it is flushed whereas low flow toilets use as little as 6 litres every flush. That's a savings of 16 litres. Depending on how many people are on staff a low flow toilet can pay for itself in a year or less! Even installing toilet tank banks will help you save 2-3 litres every flush!
- If there is a high volume of hand washing, installing a motion sensor tap is a good idea. The water only turns on when it is ready to be used BONUS!! AND...it is also much more hygienic!
- Another big water user in the commercial setting is the type of air conditioner that uses fresh water to cool. These air conditioners not only use excess amounts of water but electricity as well. Buying and installing an energy efficient model will reduce two bills at once!
- Installing low flow aerators on all faucets especially shower heads in apartments and hotels can reduce water use enormously!
- In the food services industry one of the bigger water users is washing dishes. Look at finding a way to re-use final rinse water as pre-wash water. This will also save energy for heating the water. Always turning the taps off directly after use will save a lot of water. Make it a habit and you'll never forget!
- Having a regular maintenance schedule to check all pipes and taps for leaks can help to save a lot of water. A leak of one drop per second can add up to 25 litres of water a day which is 9,000 litres in a year. A little can amount to a lot fast!
- Know where your water is being used!

CHANGING, LEADS TO SAVING, WHETHER YOU ARE ONLY CHANGING YOUR HABITS OF WATER USE OR ALL FAUCETS AND WATER USING APPLIANCES. EVERY CHANGE COUNTS, LITTLE OR BIG, IT ALL ADDS UP TO SAVING WATER!



Sources: http://www.crd.bc.ca/water/conservation/business/savingwater.htm, For More information: http://www.ec.gc.ca/water/en/manage/effic/e_cntry.htm





Door Hanger



The Water-Wise team was in your neighborhood but we missed you.

Here are some tips so you can start to get Water-Wise until next time we are by.

Ways to be Water-Wise inside your home...

- fix leaky faucets, those drips add up
- turn off the tap when you are brushing your teeth
- install low flow toilet, shower and faucet fixtures

Ways to be Water-Wise outside your home...

- use a broom to sweep your driveway, not a hose
- collect rain water in a barrel and use it to water the garden
- adjust sprinklers so only the lawn is watered



Remember... Water Conservation Begins with YOU!

Sprinkling Restrictions Are In Effect

Sprinkling is permitted during the following times:

Residential:

6:00 am to 9:00 am and 6:00 pm to 10:00 pm

Commercial:

6:00 am to 11:00 am and 6:00 pm to 10:00 pm

Even numbered houses: Wednesday and Saturday

Odd numbered houses: Thursday and Sunday

As of <u>July 15th</u> the sprinkler restrictions will change to even numbered houses on even days and odd numbered houses on odd days.

Hand watering of flowers or vegetable gardens is permitted everyday during the designated hours. Hand watering is using a water can or a house.

For more information contact the Water-Wise team at:



Box 357 Chetwynd BC V0C 1J0 Phone: (250) 401-4100 Fax: (250) 401-4101

CHETWYND E-mail: d-chet@gochetwynd.com





Appendix D





Council Meeting Speech - Introduction

June 20, 2006

Good afternoon Mayor Saugstad and Council. I would like to thank you for this opportunity to speak in front of you. I am Tara Holland and here with me today is Vanessa Herman. Together we are the 2006 Chetwynd Water-Wise team. We are employed by Urban Systems of Kamloops and are funded through and in partnership with the District of Chetwynd. As members of the Water-Wise team, our main objective is to educate the citizens of Chetwynd about local water issues and encourage the conservation of this essential resource.

As the demand for water increases during the summer months and with the new water meters being installed, we feel that it is important to increase awareness for smart water use. This is what brings us here today. We have already been active in the community and will continue to do so throughout the summer.

To date some of the activities we have participated in include:

- The tradeshow where Terasen and I displayed and distributed water conservation and watershed management information
- Attending the official planting day community garden where I handed out brochures on Water-Wise gardening
- Vanessa and I planted two Water-Wise gardens out front of the District Office. Thank you Councilor Roberts for helping us with this
- We recently prepared and presented elementary school presentations to primary students. The presentations taught children in grades K-3 to think about their water consumption and ways to conserve water

On-going projects include:

- Preparing and airing water tips that run 4 times daily on Peace FM
- An on-air show every Wednesday morning at 9:15 on Peace Fm starting June 28th
- A "conservation corner" in the Chetwynd Echo that has weekly messages and conservation tips
- Coverage of Water-Wise events and activities in both the Chetwynd Echo and Coffee Talk Express

Some of our upcoming events include:

- Participating in the Canada Day Parade
- We are also planning on proclaiming Water-Wise week from July 1st to July 7th. This way we hope to heighten media coverage, make Chetwynd citizens





- and businesses aware of the Water-Wise Team as well as challenge people to decrease their use of water. The week will begin with a kick-off barbeque after the Canada Day Parade.
- Starting mid July and continuing until the end of August, we will begin a door to door campaign to promote water conservation awareness
- Throughout July and August we plan on attending Farmer's Markets and setting up booths at other local events
- In August we will be visiting the Chetwynd Rec-Centre day camp where we will be doing a fun and age appropriate science experiment.

We would like to thank Garry Kaulbach, Rob Crisfield and all of council, for your continued support of the Water-Wise Program. Thank you for your time.

Are there any questions or comments?

On behalf of the Water-Wise Team we would like to invite you all to our Water-Wise barbeque at the Pool July 1st at 11:45am.





Council Meeting Speech – Conclusion

August 15, 2006

Good afternoon Mayor Saugstad and Council. Once again, we would like to thank you for this opportunity to speak in front of you. I am Tara Holland and here with me today is Vanessa Herman. Together we are the 2006 Chetwynd Water-Wise team. As you know, we are employed by Urban Systems and are funded through and in partnership with the District of Chetwynd. As members of the Water-Wise team, our main objective for the summer has been to educate the citizens and businesses of Chetwynd about local water issues and encourage the conservation of this essential resource.

We would like to take this opportunity to inform you of all the projects our program has been involved in throughout the summer. We feel that our program has been very productive and that we have successfully increased awareness of smart water use in Chetwynd. As you know we have been active in the community. We would like to inform you of all of the activities we have participated in over the summer:

- The program began with an information booth at the Chamber of Commerce Trade Show. Information about water shed management, and water conservation were on display and given out to those interested. The booth was shared with Terasen, and on display they had a water metre for everyone to see.
- Attended the official planting day community garden where we handed out brochures on Water-Wise gardening and had a list of plants that were available locally which require low-water, low-maintenance and are specific to this area.
- Planted two Water-Wise demonstration gardens along the side of the District Office. The gardens have done awesome and only needed to be watered 5 times throughout the entire summer. The flower beds are also covered in mulch which prevents erosion, evens out the soil temperature, improves the soil quality and prevents the growth of weeds. We spent all of 4 minutes throughout the whole summer weeding, now that is an efficient garden!
- Prepared and presented elementary school presentations to primary students. The presentations taught children in grades K-3 to think about their water consumption and ways to conserve water. During our presentation we talked about what it means to conserve water and why it is important, the water system in Chetwynd, and we did a science experiment. The presentation was followed by a fun, interactive game which was designed to show children how much work it would be if they had to haul water for every activity they did throughout each day. We concluded with all of the children taking a pledge to conserve water and handing out activity booklets. At the end of each





presentation we handed out an evaluation form to each teacher to get some feedback for improving our presentation. Some of the comments included "Good job," "Very dynamic and age appropriate," "excellent management," and "the presenters had a real interest in their presentation." All of the classes were receptive and enthusiastic and we rewarded the most enthusiastic class with a pizza party.

- Entered a float in the Canada Day Parade which won second place for originality. This was a great opportunity for people in the community to recognize us and our program.
- We proclaimed Water-Wise week from July 1st-July 7th. The week was a great way to make Chetwynd citizens and businesses aware of the Water-Wise Team as well as challenge people to decrease their use of water. The week began with a successful kick-off barbeque and was followed by many events, such as, challenging the Water-Wise Team to a game of mini-golf, a colouring contest, game of kick-ball, radio call-in contest and an information booth. We also had a tour of the water treatment plant planned but unfortunately we had to cancel this event due to the forest fires in Tumbler Ridge. Overall we had a great turn out for all of the events and fun was had by all.
- We ran two Water-Wise challenges for kids which consisted of two separate
 weekly competitions. Each competition included ten water-saving statements,
 one of which was an incorrect statement. Children who correctly indicated
 which point was NOT Water-Wise were entered into a draw. For each
 challenge we had five winners who we presented prizes to.
- We proposed that the District of Chetwynd implement a Rain Barrel Program similar to the existing composting program. The Community Improvement Committee approved the proposal and recommended that Council and the Peace River Regional District participate in the program. We proposed that residents who purchase rain barrels locally will be eligible to receive a rebate. We feel this is another way to give residents incentive to conserve water.
- We also attended two Farmer's Markets where we handed out water conservation as well as promotional material.
- Presentation for preschool day camp at the Rec. Centre. Here we learned that you are never too young to start conserving water. Through a story we were able to communicate the importance of water conservation. Again we received positive feedback from the teacher and hear that the children are actively practicing water conservation in the classroom.
- The last few weeks we have been busy with our door-to-door campaign which was another way of promoting water conservation awareness. We visited all the homes and businesses located within city limits. Anyone who practiced water conservation was entered into our weekly draw for a chance to win Water-Wise promotional materials. This was our way to say thank-you to those who practice water conservation.





- Last Friday we participated in the Annual Exhibition and Rodeo Parade in Dawson Creek. This was an opportunity to publicly display our water conservation program.
- Next week we will be doing a presentation for a day camp at the Chetwynd Rec-Centre. We are doing a fun sing along song using the popular skip to my Lou tune, with water conservation lyrics!

On-going projects include:

- Preparing and airing water tips that run four times daily on Peace FM
- An on-air show every Wednesday morning at 9:15 on Peace Fm where we discuss our weekly conservation tips and upcoming events. This is also where we did our weekly draw for those residents and businesses who practice water conservation
- A "conservation corner" in the Chetwynd Echo that has weekly messages and conservation tips
- Coverage of Water-Wise events and activities in both the Chetwynd Echo and Coffee Talk Express

We would like to thank Garry Kaulbach, Rob Crisfield and all of council, for supporting the Water-Wise Program. Thank you for your time.

Are there any questions or comments?





Water-Wise PlantS Avaliable Locally



Botanical Name	Common Name	Height	Foliage Colour	Fall Colour
	111			
Acer Finnala	Amur Maple	5-10 m	Green	Gold/Yellow/Orange
Elaeagnus	Russian Olive	5-10 m	Grey	
Angustifolia				
Hippophae	Sea	2-5 m	Grey	
Rhamnodes	Buckthorn			
Pinus Mugo	Mugo Pine	1-2 m, 2-5 m,	Green	
_	_	5-10 m		
Prunus Padus	Mayday Tree	5-10 m,	Green	Gold/Yellow/Orange
Commutata		10-15 m		
Prunus	Chokecherry	5-10 m	Green	Red/Purple
Virginiana	-			_
Quercus	Bur Oak	Over 15 m	Green,	Red/Purple
Macrocarpa			Gold/Yellow/	
			Orange	

- If you are applying the same amount of water to your trees as you are to your lawn, you are probably either over-watering your lawn or under-watering your trees. Place a drip system or a soaker hose at or beyond the dripline of your trees and deep water them no more than once a week in the summer.
- Trees carrying fruit need more water then those that are not.
- Be observant. Look for signs of stress such as dropping or dull leaves.
- Mulch around trees and shrubs to slow moisture loss through evaporation.
- Generally, trees and shrubs should be planted 1-1/2 times their mature width from any building.





Shrubs

Botanical	Common	Height	Foliage	Fall Colour
Name	Name		Colour	
Buddelia	Butterfly Bush	2-5 m	Green	
Davidii				
Cornus	Red Osier	1-2 m	Green	
Stolonifera	Dogwood			
Cotoneaster	Creeping	Under 30 cm	Green	
Adpressus	Cotoneaster			
Cotoneaster	Hedge	2-5 m	Green	Gold/Yellow/Orange,
Lucidis	Cotoneaster			Red/Purple
Genista spp.	Broom	Under 30	Green	
		cm, 30 cm to		
		1 m		
Juniperus	Creeping	Under 30 cm	Green, Blue	Red/Purple
Horizontalis	Juniper			
Physocarpus	Golden	1-2 m	Green	
Opulifolius	Ninebark			
Potentilla	Potentilla	1-2 m	Green	
Fruticosa				
Shepherdia	Russet Buffalo	1-2 m	Grey	
Canadensis	Berry			
Syringa	Lilac	2-5 m	Green	
Vulgaris				

Perennials

Botanical Name	Common	Season	Height	Colour
	Name			
Achillea	Yarrow	Mid, Late	30-60 cm	White, Red, Pink,
Millefolium				Purple
Alcea Rosea	Hollyhock	Mid, Late	Over 60 cm	White, Yellow,
				Red, Pink, Purple
Anemone	Pasque Flower	Early	Under 30 cm	White, Pink,
Pulsatilla	_			Purple
Aquilegia	Columbine	Mid, Late	30-60 cm,	White, Yellow,
			Over 60cm	Pink, Purple, Blue
Campanula	Creeping	Mid	Under 30 cm	White
Cochleariifolia	Bellflower			
Cerastium	Snow in	Early, Mid	Under 30 cm	White
Tomentosum	Summer			





Dianthus Plumarius	Cottage Pinks	Mid, Late	30-60 cm	White, Pink
Linum Perenne	Perennial Flax	Mid	30-60 cm	White, Blue
Lychnis Chalcedonica	Maltese Cross	Mid	Over 60 cm	Orange
Nepeta spp.	Catnip	Early, Mid, Late	30-60 cm, Over 60 cm	Purple, Blue
Perovskia Atriplicifolia	Russian Sage	Mid, Late	Over 60 cm	Purple
Potentilla spp.	Cinquefoil, Potentilla	Early, Mid	Under 30 cm, 30-60 cm	Yellow
Sedum Kamptschaticum	Russian Stonecrop	Mid	Under 30 cm	Orange
Stachys Byzantina	Lamb's Ears	Early, Mid, Late	30-60 cm	Purple
Veronica	Speedwell	Mid	Under 30 cm, 30-60 cm	Pink, Blue
Yucca Filamentosa	Adam's Needle	Mid	Over 60 cm	White



Annuals

Botanical Name	Common	Light	Height	Colour
	Name			
Centaurea Cyanus	Bachelor's	Full sun,	30-60 cm,	White, Pink,
	Button	Partial shade	60 cm to 1 m	Purple, Blue
Centauria Cineraria	Dusty Miller	Full sun	Under 30 cm,	
			30-60 cm	
Coreopsis Tinctoria	Coreopsis	Full sun	Under 30 cm,	Yellow,
spp.	Tickseed		30-60 cm,	Orange, Red,
			60 cm to 1 m	Pink, Purple
Eschscholzia	California	Full sun,	30-60 cm	White,
Californica	Poppy	Partial shade		Yellow,
				Orange
Euphorbia	Snow on the	Full sun,	30-60 cm	White
Marginata	Mountain	Partial shade		
(poisonous)				
Gazania Ringens	Gazania	Full sun	30-60 cm	White,





				Yellow,
				Orange, Pink
Helianthus Annuus	Sunflower	Full sun,	30-30 cm,	White,
		Partial shade	60 cm to 1 m,	Yellow,
			Over 1 m	Orange, Red,
				Purple
Limonium Sinuatum	Statice	Full sun	30-60 cm	White,
				Yellow,
				Pink, Purple,
				Blue
Mesembryanthemum	Ice Plant	Full sun	Under 30 cm	White,
				Yellow, Pink
Salvia spp.	Salvia	Full sun,	30-60 cm	White, Pink,
		Partial shade		Purple, Blue
Xeranthemum	Dried	Full sun	60 cm to 1 m	White, Pink,
Annuum	Everlasting			Purple



Botanical Name	Common Name	Bloom	Height	Colour
Allium	Chives	Summer	30-60 cm	Pink
Schoenoprasun				

Ground Covers

Botanical Name	Common Name	Season	Colour
Achillea	Wooly Yarrow	Early	Yellow
Tomentosa			
'Aurea'			
Aegopodium	Goutweed	Early, Mid, Late	White
Podagraria			
Arabis spp.	Rockcress	Early	White, Pink
Arctostaphylos	Bearberry,	Early, Mid, Late	
uva-ursi	Kinnikinnick		
Sedum spp.	Stonecrop	Early, Mid, Late	Yellow, Orange,
			Pink
Sempervivum spp.	Hens & Chicks	Early, Mid, Late	White, Pink





Ornamental Grasses

Botanical Name	Common Name	Height	Foliage
Festuca Ovina	Blue Sheep's	Under 30 cm,	Blue
'Glauca'	Fescue	30-60 cm	



Botanical Name	Common Name	Type	Height	Colour
Parthenocissus	Virginia Creeper	Perennial	Over 5 m	
Quinquefolia				





Water-Wise Gardening in Chetwynd

What can you do to be a Water-Wise gardener?

- Make a conscious decision to be
- Reduce grass areas.
- Alter your irrigation to match your plants' water demands.
- Mix organic matter into the soil.
- Apply mulch to and around existing plants.
- your garden, other gardens and
 - natural areas gardening books & publications available plant material.
 - Consult the experts:
 landscape architects
 nurseries.
- Follow these Water-Wise principles when creating or renovating your garden.





out these great websites:

http://www.gardenwise.bc.ca

http://www.smartgardening.ca

If your are interested in having your soil analyzed contact Norwest Labs in Fort St. John at (250) 785-2731

For more Information, Contact the District of Chetwynd at 401-4100

Source: Xerbcape Landscaping in Karoloops. City of Karoloops.



Water-Wise Gardening in Chetwynd



Saves water, work, money and our environment!



Benefits of being Water-Wise in your Garden:

Smaller lawn areas, effective use of mulching, landscaping and proper irrigation systems help create water efficient gardens which are often less work than conventional gardens.

Save Money

When you save water in the garden you when you save water in the garden you save money. By using water more efficiently, you will have the potential to reduce your outdoor water use while still maintaining a green, pleasant and rewarding garden.

Environment Friendly

A Water-Wise gardener helps to save the environment by:
- reducing the use of fertilizers and
chemicals, and



7 Secrets to Water-Wise Gardening

Planning & Preparation

- design your garden with water conservation in
- create a plan to consider land use, circulation, sun & wind exposure as well as existing

Improve the Soil

- Appropriate Plant Selection
- when selecting plants consider size, shape, appearance and also the amount of water they appearance and also the amount of water they require - water efficient plants save money and create a

- lawns require more water then other areas of

Water-Wisely

- water plants as required for their needs
 water early in the day and soak rather then sprinkle

 use a rain barrel to capture chlorine-free water
 which is better for your garden
 visit your local garden centre or an irrigation
 professional who can offer valuable advice.

Use More Mulch

- ensure the mulch is kept clear of tree trunks and plant stems to avoid possible fungal

Garden Maintenance

check regularly to see that plants are adequately watered and mulch is topped up
 any new planting should follow the objective of saving water.







Water-Wise Challenge #1

Hey kids, get Water- Wise and enter to win prizes!

Find the right answer and you're in the draw!

Just tell us which one of these 10 points is NOT Water-Wise and go into the draw to win a Prize Pack!

- 1. Get Mum or Dad to fix all the leaking taps around your home. A dripping tap can waste as much as 60 litres a day. That's 1,800 litres a
- 2. When using a sprinkler make sure that you're watering the lawn and not the pavement or driveway.
- 3. Paddling pools, buckets and bowls are much better for playing or for cooling down than hoses. After you've finished, make sure you empty the water on the lawn or gar-
- 4. On a very hot day use the hose for water play
- 5. Whenever you wash dishes or vegetables, use a bowl of water rather than washing them under a running tap.

- 6. Turn off the tap while you're brushing your teeth.
- 7. Keep a jug of water in the fridge. This will save you running the tap to get the water cold.
- & Instead of hosing your path or driveway, sweep it.
- 9. Use a bowl or a container to wash your dog rather than a
- 10. Get Mum or Dad to change the old showerhead for a more water-efficient one.

HERE'S HOW TO WIN YOUR PRIZE PACK

How to enter:

- 1. Fill in the answer, with your name, address and telephone number.
- 2. Cut out this coupon and drop it off at the District Office in Chetwynd.
- 3. To win the Water-Wise Prize Pack you must get your entry in by Friday July 28, 2006. And don't forget to watch out for the next Water-Wise Challenge on August 11, 2006.
- 4. Winners will be notified by the phone.

The answer is number	Chetwater-wis
Name: Age:	
Phane:	

















Water-Wise Challenge #2

Hey kids, get Water-Wise and enter to win prizes!

Find the right answer and you're in the draw!

Just tell us which one of these 10 points is NOT Water-Wise and go into the draw to win a Prize Pack!

- 1. Get Mum or Dad to fix all the leaking taps around your home. A dripping tap can waste as much as 60 litres a day. That's 1,800 litres a month!
- **2.** If you water early in the morning or late at night, less water will evaporate. Don't water in the middle of the day.
- **&** You'll save a lot of water by taking short showers instead of bathing.
- **4.** In the summer, you can toughen your lawn by watering it only once or twice a week.
- **5.** Get Mom or Dad to park the car on the lawn before you wash it. That way the lawn will benefit too. Also, use a bucket of water for washing and only use a hose for rinsing.

PEOPLES DRUG MART





- **6.** Weeds will use up water so make sue you keep them under control.
- **7.** Get Mom or Dad to put a nozzle on your hose to control the amount of water you use.
- & You shouldn't fix leaking taps.
- **9.** A good soaking every few days is better than a light sprinkling every day. It encourages stronger plants with deeper roots.
- 10. To see if the toilet is leaking, put some food colouring in the toilet tank. If the colouring appears in the bowl without having flushed the toilet, it will need to be fixed.

HERE'S HOW TO WIN YOUR PRIZE PACK

How to enter:

- 1. Fill in the answer, with your name, address and telephone number.
- 2. Cut out this coupon and drop it off at the District Office in Chetwynd or at the leisure pool.
- To win the Water-Wise Prize Pack you must get your entry in by Friday August 25th at 12:00pm
- 4. Winners will be notified by the phone

,	
The answer is number	Chetwater-wise
Name: Age:	
Address:	
Phone:	













Appendix E





Sample of Water Tips Advertised on Peace FM

SFX: WELL HEARD TWO OR THREE 'WATER DRIPS' OFF THE TOP INTO APPROPRIATE MUSIC BED THROUGHOUT

Team member: This is (BLANK) from the District of Chetwynd Water Wise Team, with a Water Wise Tip: ...placing a 'toilet tank bank' in your toilet displaces the amount of water the tank fills up with, and allows you to use less water per-flush. You could save 20 to 40 litres per-day. 'Toilet tank banks' are available at the District Office, along with other great water saving devices. Or you'll receive a FREE 'toilet tank bank' upon the installation of a water metre. The District of Chetwynd Water Wise Team wants you to think water conservation this summer.

Week 1: Indoor Bathroom Tips

- Did you know that about 70-percent of indoor home water use occurs in the bathroom and that toilets are the single largest water wasters? Most toilets use over 40-percent more water than necessary. And remember never to leave the water running while washing your face or hands, shaving or brushing your teeth.
- Take short showers instead of baths. Try to time your shower and keep it under five minutes. You'll save up to four thousand litres of water a-month. If you must have a bath, use the minimum amount of water necessary by closing the drain first and only filling the tub one-third full.

Week 2: Outdoor Tips

- Use a rain gauge to determine how much rain or irrigation your yard has received. For accuracy, put it in an area that doesn't get too much or too little water from your sprinkler. Most plants and grass only need 25-millimetres of water per-week as long as too much doesn't evaporate from the soil. Your local garden expert will know best the weekly water requirements of your plants.
- Watering in the morning not only cuts down on evaporation, but helps to prevent the growth of fungus,...yuck! And be sure to put a layer of mulch down around all your trees, shrubs and gardens to help slow down evaporation. This means you won't have to water as often.
- Adding water gel to your soil helps to retain moisture. The gel forms water bound beads of jelly in the rooting area for plants to draw in when growing under dry or drought conditions. Water gel is available at the Hillside Garden Company Dawson Creek. For more information, call 250-782-3971.





Week 3: Indoor Tips

- Conserve water, because it's the right thing to do. Never waste water simply because someone else is footing the bill, such as when staying at a hotel. And remember to scrape, rather then rinse dishes before loading them into the dishwasher.
- If you wash dishes by hand and that's the best way don't leave the water running when rinsing. If you have two sinks, fill one with rinse water. If you only have one sink, use a spray device or a short rinse under a slow-moving stream from the faucet.
- Replace all household faucets with low flow aerators. Most aerators are rated at seven to 11 litres of water per-minute. By replacing them with low flow aerators, you'll save up to three litres per-minute. Low flow aerators are available at the District Office, along with other great water saving devices. Or you'll receive a FREE low flow aerator upon the installation of a water metre.

Week 4: Outdoor Tips

- Water your lawn only when it needs it. An hour of sprinkling uses 13-hundred litres of water, giving your lawn two-and-a-half centimetres of absorption. Since this is all your lawn requires at one time, there is no benefit to over watering. By changing your sprinkling from three hours to one hour, you'll save 26-hundred litres of water.
- Set your lawn mower blade to keep the grass at least three inches long. Longer grass helps keep water in the ground, and it won't wilt so easily in the heat of the sun. Did you know that the internet can be a great tool to help you save water in your yard and educate you on drought resistant plants? Find out more by logging on to www.gardenwise.bc.ca.
- Have you ever heard of Xeriscape Landscaping? The Water-Wise Team has created brochures to explain how water wise gardening follows similar principles as Xeriscape Landscaping. This helpful information is available free of charge at the District Office.

^{*} We prepared tips for 11 weeks which ran on the radio and in the newspaper





Water Conservation Corner

A sample of the weekly water conservation corner which ran weekly in the Chetwynd Echo:

