

Stormwater News



BROUGHT TO YOU BY THE CITY OF KEIZER ENVIRONMENTAL AND TECHNICAL PROGRAM

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Looking to the Future – What do YOU Want to See? By Nate Brown

The City of Keizer is currently working on plans for our future and we need your input. The City received grant funds through the state of Oregon’s Transportation and Growth Management program to study growth related costs and impacts, and to create a plan for revitalizing our commercial core. We are also in the process of updating our housing needs analysis which identifies forecasted population growth and will identify the appropriate supply and mix of housing types needed to accommodate that growth. These projects are vital to shaping the future of Keizer, so it is imperative that your community voices are heard.

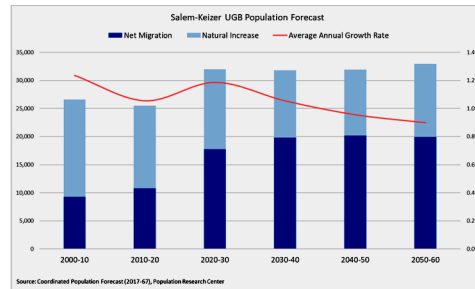
Through the Education and Outreach grant, the City has been

working with consultants to explore the “Costs of Growth” in relation to different growth patterns. There have been stakeholder meetings, public workshops, and analysis of other jurisdictions’ growth. Ultimately a final report will be shared with City Council to quantify what types of costs are associated with various growth patterns to educate the future policy decisions that will need to be made regarding growing in, growing out, or growing up. The Keizer Revitalization Plan project looks to revitalize the commercial core of Keizer along River Road and Cherry Avenue while allowing for additional housing types and uses. The project is designed to determine what types of re-development and intensification

of uses are “right” for Keizer.

Next project on deck, (after the three already mentioned) is a Salem Keizer Area Transportation project to specifically identify impacts of growth on our transportation system. Study, Study, Study, Study!

Please, please be involved!



The growth affecting Keizer can lead to increased traffic, impervious surfaces, and less tree canopy. These factors can lead to negative impacts on our watershed if not managed responsibly..

Special points of interest:

- THE FIRST URBAN GROWTH BOUNDARY IN THE UNITED STATES WAS ESTABLISHED IN LEXINGTON, KENTUCKY IN 1958 CITY LEADERS WERE WORRIED ABOUT SPRAWL FROM THE CITY EFFECTING THE SURROUNDING HORSE FARMS THAT WERE TIED TO THE CITY’S CULTURAL IDENTITY.

Adopt-a-Street

Did you know that 9 billion tons of litter end up in the ocean every year? Or how about the fact that the average amount of litter in the US breaks down to about 6,700 pieces of trash per mile.

The Adopt-A-Street Program has proven to be successful in improving appearance through litter pickup and is a



great way for community based organizations/groups and businesses to show their involvement in the community. This Program provides

another opportunity for business and community based organizations/groups to work together in this effort

Keizer street sections that are available for adoption:

- Chemawa Road (River Road West to Verda Lane)
- Dearborn Avenue (River Road West to Verda Lane)
- Ulali Drive
- Windsor Island Road (Chemawa Road to City limits)
- Verda Lane (Chemawa Rd to Parkway)

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Interns By Mark Akimoff



A tree survey intern uses a clinometer to check the height of a street tree.

The City has worked with Chemeketa Community College over the past few years on a number of mutually beneficial projects. Several years ago we helped the college put together a curriculum for the Phytotechnology class, where students got an excellent opportunity to learn how plants are used to solve environmental problems.

Over the past several years we have also hosted several interns in the Environmental and Technical

Program. These have proven to be very valuable to our department. The tree survey data that was collected on a number of parks and City owned properties has been a good start toward developing a solid inventory of City owned trees throughout Keizer.

This fall we are happy to be working with the Parks Department to host another intern. The idea is to split time between surveying natural resource issues in the parks such as invasive

species coverage, heavy use trails, dumping issues, homeless camps, hazard trees, encroachment, etc.

Interns have proven to be a valuable resource in the Environmental and Technical program and we are sure that the Parks Department will find them a worthwhile addition to the labor force as well. We are hoping to expand our partnership with Chemeketa to include Linfield College in our search for qualified interns.

Mercury and Coal By Mark Akimoff

"IT'LL FORM AS A HABIT AND SEEP IN YOUR SOUL

TILL THE STREAM OF YOUR BLOOD RUNS AS BLACK AS THE COAL

WHERE IT'S DARK AS A DUNGEON, DAMP AS THE DEW, DANGER IS DOUBLE, PLEASURES ARE FEW.

WHERE THE RAIN NEVER FALLS THE SUN NEVER SHINES IT'S A DARK AS A DUNGEON WAY DOWN IN THE MINE "

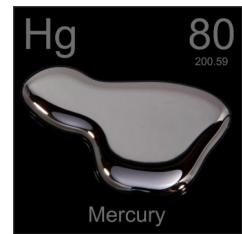
JOHNNY CASH-
DARK AS A DUNGEON

Mercury is a well-known pollutant in the environment, especially of concern to people who fish and consume seafood. There has been a lot of buzz in the media lately about coal production and especially coal fired power plants. Coal combustion is the single highest contributor, responsible for almost 50% of atmospheric mercury in the US. This is the mercury that is transported in the atmosphere from combustion and then falls out in rain or snow to bio-accumulate in the environment, leading to toxic levels in fish and other animals.

Mercury toxicity impacts proteins in the body, where elements and

element groups (compounds) make chains in specific formations, that allow cells to function. Important elements in the protein chains include sulfur (S) and selenium (Se). When mercury (Hg) binds to sulfur or selenium, it can disrupt the protein chain to the point of impairing cell function and damaging cells, affecting neurological function and organs.

Scientists have shown a correlation between the closing down of coal fired power plants on the east coast and the drop in the mercury contamination levels in Bluefin tuna harvested off the East Coast of the US.



The simple truth is that coal is bad for the environment and human health. Natural gas is far cheaper for the consumer, and renewable energy offers the potential to power our ever-increasing electrical needs without destroying the planet. The coal industry employs less people in the US than the fast food chain Arby's does. Time has proven it is poisonous to us, obsolete and has no economic advantage.

Infrastructure updates By Lyle Bell



Greg Hamilton lays some storm pipe on the Faymar Ave. outfall repair this summer.

Pacific Int-R-Tek camera scoped an outfall pipe last winter along Claggett Creek and revealed that the pipe had numerous problems including holes, cracks, deformations and some crushed areas.

As with any TV report, it takes some practice and skill to actually determine if it is worthy of repair. Some of the minor offsets and spider cracking are not always worth tearing up concrete, a.c., or peoples yards. This TV report was

absolutely worthy of the time and expense given the severity of the cracking and the fact that it drains a relatively large area. All total, this repair took four people about six hours to complete with the aid of a mini excavator. Work consisted of 46' feet of 10" clay pipe with 46' of 10" 3034 drain pipe including a reconnection of a 4" rain drain with an insert-a-tee. Juan Aleman started excavating at the end of the outfall pipe upstream to the end of the crushed/cracked pipe where we

then fitted a rubber coupler called a "ferenco" from the 10" I.D. clay pipe to 10" I.D. 3034 plastic pipe. The tricky part was connecting the existing 4" concrete pipe from the homeowner's downspout to our new 10" plastic pipe. We accomplished this using a plastic fitting called a "insert-a-tee".

Good Job, storm crew on fixing an important part of City infrastructure and making a homeowner happy!

SFAM-A Functions Based Stream Assessment Method By Mark Akimoff

Division of State Lands in conjunction with the Environmental Protection Agency and the Army Corps of Engineers have developed a new method for supporting compensatory mitigation decisions in Oregon.

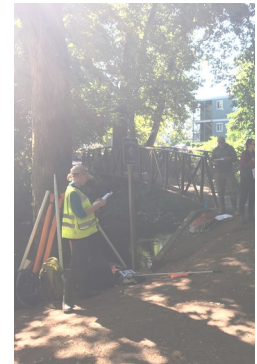
SFAM-The Stream Function Assessment Method is designed to replace the antiquated practice of compensating for an impact such as development or bridge replacement on or near a stream, based on

acreage only. This new method allows developers, engineers and scientists to account for the functions and values of a stream when allowing an impact to the stream. In a nutshell this allows for a better replacement of what the stream is imparting such as flood storage, shade, habitat, overbank flow, incision, floodplain exclusion, etc.

Mark Akimoff with the Environmental and Technical

Division attended the two day training event with the classroom portion taking place at Portland State University and the field portion at Bush's Pasture Park along a stretch of Pringle Creek. Many local engineering firms, consultants and city and state agencies were present at the training.

Any new DSL or ACOE permit that the City applies for will require a current SFAM to be submitted along with the application for a permit.



A representative for the Army Corps of Engineers prepares a study course during a recent training in SFAM protocol.

What does this winter have in store? By Mark Akimoff

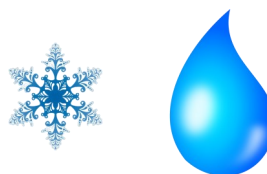
In a past newsletter issue I wrote about the long range weather forecast provided by Pete Parsons of the Oregon Department of Forestry. These three month surveys of the upcoming weather year take into account years of weather data and mostly tie the conditions being forecasted with the SSTs (Sea Surface Temperatures) recorded from past years, known as the

analog years. By comparing general patterns in weather, think unusually wet or dry spells, to the recorded sea surface temperature over decades and decades, meteorologists are able to make a pretty good guess at what might be coming up. So what does this winter have in store? Well, at the time of publication, it looked like we were lining up in a weather

pattern that looked very similar to the epic winter of 1996.

Follow the link to read what Pete says we might get for fall and winter weather:

[Click here for long range forecast](#)



“PEOPLE DON'T NOTICE WHETHER ITS WINTER OR SUMMER WHEN THEY'RE HAPPY”

ANTON CHEKHOV

GIS Updates By Billy Johnson

This year, Keizer's stormwater crew used ArcGIS online to inspect 2,600 structures. As a follow-up, the crews cleaned 300 of those structures, again utilizing a tablet and ArcGIS online to track and manage their progress. Thanks to the new system, crews save 2-3 weeks of staff time between navigation, data input and

follow-up management of assets. It also allows supervisors to track progress, evaluating workload and planning for the future. All of the input is live and can be accessed by any allowed user with a computer, phone or tablet. Asset management relies on an “if you can track it, you can fix it” mentality. With City crews

better able to track thousands of catch basins and miles of storm and water pipe, throughout the city, they can quickly respond to a situation should a need for repair arise. This saves valuable time, which means cost savings across the board for the City and for rate payers.



City assets like catch basins are tracked online allowing crews to quickly respond to needed repairs



Pride, Spirit and Volunteerism

CITY OF KEIZER

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The Environmental & Technical Division is responsible for implementing the City's regulatory programs and meeting compliance strategies of stormwater permits. These programs are primarily focused on protecting water quality in local waterways and groundwater. Protection of these resources is required through the federal Clean Water Act and Safe Drinking Water Act.

The City's three mandated programs are as follows:

1. **The National Pollutant Discharge Elimination System (NPDES) Phase II permit.** This permit allows the City to discharge stormwater to local waterways through implementation and compliance with a Stormwater Management Plan.
2. **The Wastewater Pollution Control Facilities (WPCF) permit.** This permit allows the City to manage stormwater by injection into the ground through implementation and compliance with a Underground Injection Control Management Plan.
3. **The Total Maximum Daily Load (TMDL) Implementation Plan.** This plan manages the discharge of stormwater that flows overland directly to waterways.

**We are on the web
at: www.keizer.org**

How Well Do you Know City Staff?-Matt Wieberdink Parks Operations and Maintenance



Matt Wieberdink and his young son enjoy a first trip to the Oregon Coast Aquarium.

How long have you worked for the City?
6 months

What do you like best about your job?
I love that the job isn't repetitive, everyday brings something new

AC/DC, Frank Sinatra or Johnny Cash?
AC/DC

If you could max out a credit card at any store and didn't have to pay it off what would you buy?
I would probably buy a quad

What is the farthest point away from Keizer Oregon you have been in your life?
Gold Beach California
What is your favorite

outdoor activity?
Going camping

What is your passion?
Family