Storm Water and Sustainable Landscapes

Green Gardening – October 2016

EJ Hook, Environmental Services Manager
My World
Culture

Time

Money

Awareness
Culture

Diversion Rate Year to Year
Does Not Include Compost

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<th>Year</th>
<th>Diversion Rate</th>
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Culture
Culture

Tree Planting

- Removed
- Planted

Introduction

- History
- Clean Water Act
- MS4
- Minimum Control Measures
- What You can do Yourself
- What You can do with a little help from your friends
The Water Cycle
The Water Cycle
How and Why we got Here
Clean Water Act
Municipal Separate Storm Sewer Systems for Urbanized Areas

MONTANA STATE UNIVERSITY
**MS4-Minimum Control Measures**

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Construction Site Runoff Control
- Post Construction Storm Water Management
- Pollution Prevention/Good Housekeeping
MS4-Minimum Control Measures

• Quality
• Quantity
• Education
Why Should you care?
Why Should you care?
Why Should you care?
Mandeville Creek
BMP - Mowing
## BMP-Fertilizer

### Water Quality Testing Summary

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<th>Date</th>
<th>Nitrate</th>
<th>Total N</th>
<th>Amm-N</th>
<th>Cal</th>
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*mg/L (water)*

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**Note:** nd = Not Detected
BMP - Measurement

- Turbidity Before
BMP - Measurement

- Turbidity After
BMP – Water Use

Average Irrigation Use per Year
(Millions of gal/year)

Average Irrigation water use per Day
(gal/day)
Daily work practices have an impact on water quality.
BMP - Housekeeping

Are you ready?
BMP - Housekeeping
BMP - Housekeeping

What are you going to do?
BMP - Educate
BMP - Educate
BMP - Educate
Success
BMP - Construction

Bad
BMP - Construction

Bad

Good
BMP - Construction

Nice Try
BMP - Construction

Nice Recovery
BMP - Construction

Well done
BMP - Educate
Confused? Not your Job?
Planning – Post Construction
Planning – Post Construction
Planning - Post Construction
Planning – Post Construction
BMP - Educate
BMP – No Input
BMP – Less Input
BMP – Productive Input
Culture

Time

Money

Awareness
Summary
Summary
Take Home

• Expand your View
• Do your Part
• Share your Progress
Comments/Questions