Water System Survey Tips

Partner Spring Training
May 2019
Kari Salis, PE
DWS Technical Manager

(Enter) DEPARTMENT (ALL CAPS)
(Enter) Division or Office (Mixed Case)

Presentation overview

- Counting population and connections
- Documenting interties
- Operator certification changes
- Locking / Unlocking
- Turning off password protection
- Inserting photos
- Reminders
- Other questions / issues?

Counting Population, per EPA memo

Population served =

# of residential consumers

+

Avg # of regular consumers served, per day, during a month

+

Avg # of transient consumers served, per day, during a month.

Connections

- For Community systems, count the number of connections to different properties or year-round residences
- Many non-community systems are all on one property ➔ one connection
  - Note: plumbing code applies to piping, not our distribution requirements (no deficiencies)
  - Do not count buildings as connections
- If a mix of uses on different properties, count properties

Examples

- A town on the coast has 500 permanent residents in 200 homes and another 300 vacation homes that are rented out. The town also has 2 hotels with 50 rooms, and many tourists visit the 30 restaurants and shops.

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- # connections = 732
- Population = 500 + [300 x 3 x occupancy rate] + [50 x 2 x hotel occupancy rate] + [30 x estimated daily tourists]

Examples

- An RV park has 25 spaces, a store, a gas station, and the manager's home. 5 of the RVs have semi-permanent residents.

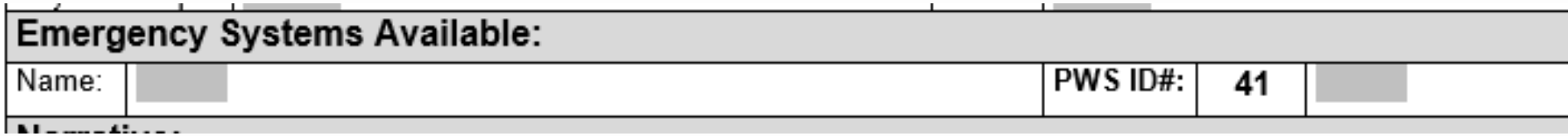
Examples

- An RV park has 25 spaces, a store, a gas station, and the manager's home. 5 of the RVs have semi-permanent residents.

- # Connections = 1
- Population = [20 x 2 x occupancy rate] + [store daily users] + manager's family + [5 x 2]

Documenting Interties

- When discussing sources, ask if the system has any interties with nearby systems
- If so, list it as a source / EP
- Depending on how often it is used, it would be emergency, seasonal, or permanent
  - Manual vs auto, one-way flows, etc
- EP name would be “City of Good Neighbor #00123”



Emergency Systems Available:				
Name:		PWS ID#:	41	

Operator Certification changes

- If changes have been made to the system, check operator certification requirement!
- If population increases:
  - Above 150 connections: WD1
  - 1501-15,000 people: WD2
- If treatment is added:
  - 4-log disinfection: WT1 is needed if > 150 conn
  - Adding fluoride, arsenic or nitrate removal: WT1
- <150 connections: Small Operator only

Survey Template Instructions

Survey Form Templates

- About Survey Template Packets
- Survey Template Instructions
- Instructions for adding an On/Off toggle switch for Word forms
- Outstanding Performer Template

The following documents are password protected *(they currently open best in Firefox)*:

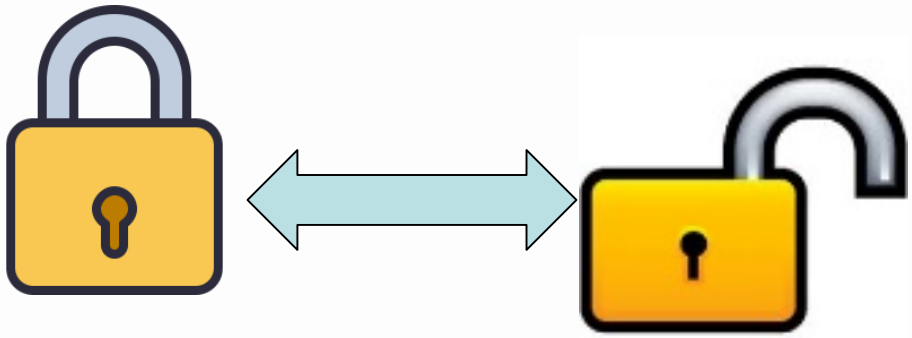
- Packet 1: C-NTNC Groundwater Survey Template - *revised 05/30/2018*
- Packet 2: C-NTNC Surface Water Survey Template - *revised 05/30/2018*
- Packet 3: TNC-NP Survey Template - *revised 05/30/2018*

Survey forms overview

- Don’t leave blanks, mark “Yes, No, or N/A”
- Comments sections
  - Follow up of “no’s”
  - Allows for further details
- Information pages (back sides usually) to assist with filling in sections (service area, treatment codes)
- Deficiencies: check for consistency between cover letter, summary checkboxes, and forms

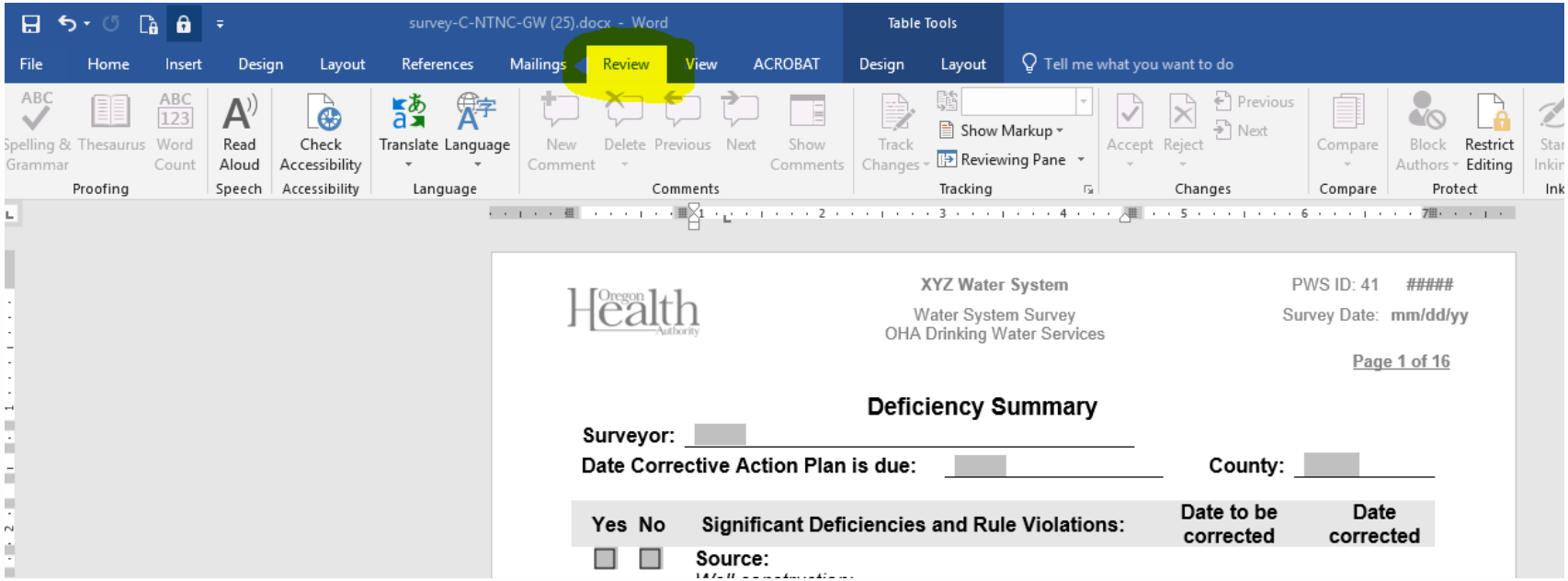
Password protected forms can be "Locked" or "Unlocked"

- Password prevents public from completing their own surveys. (survey forms should be converted to PDF when e-mailing to water system operators).
- Survey forms are mutually locked to allow only entry into form fields.
- Forms can be unlocked to allow inserting pages, photos, or schematics and then re-locked for form field entry.



Survey basics – editing document

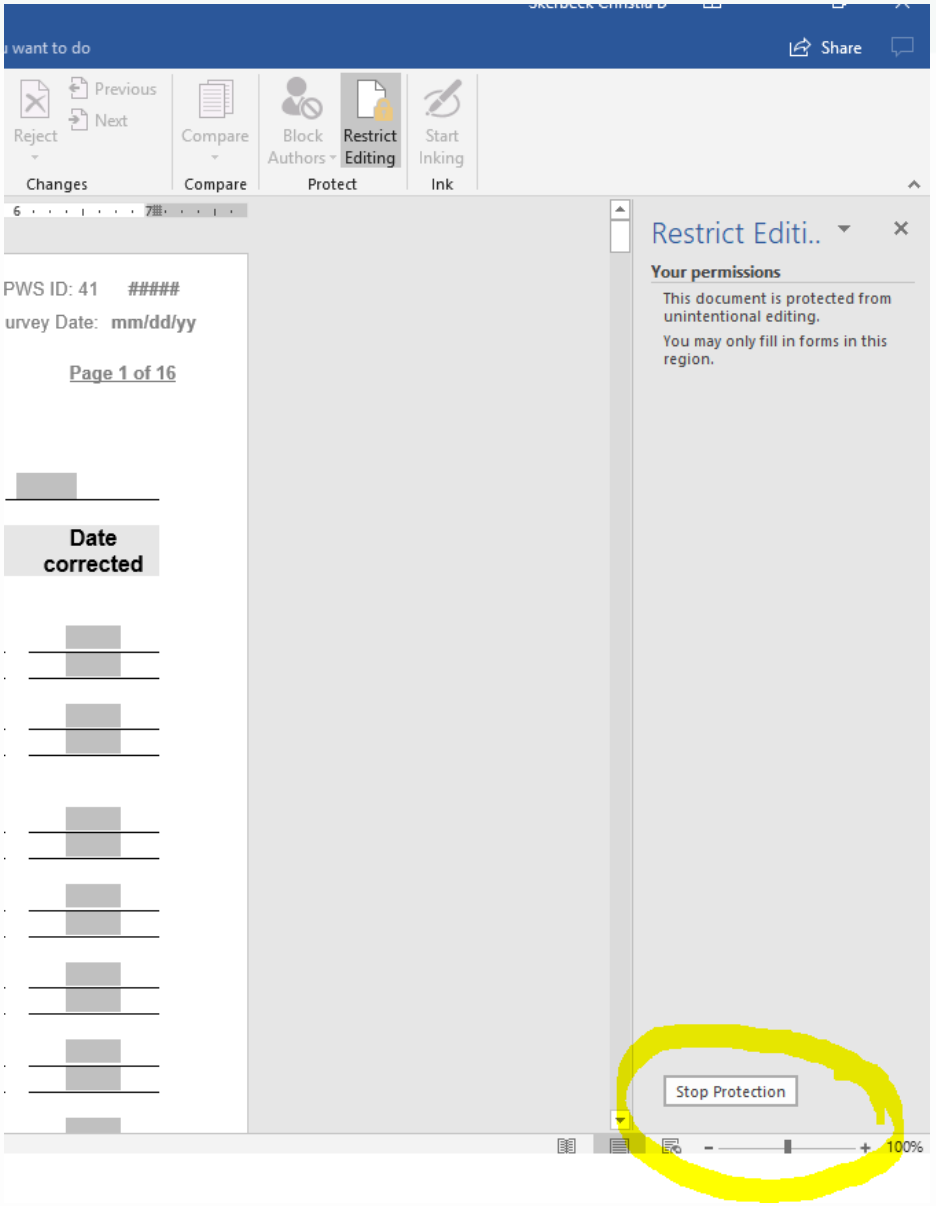
- Click on the **REVIEW** tab



Editing

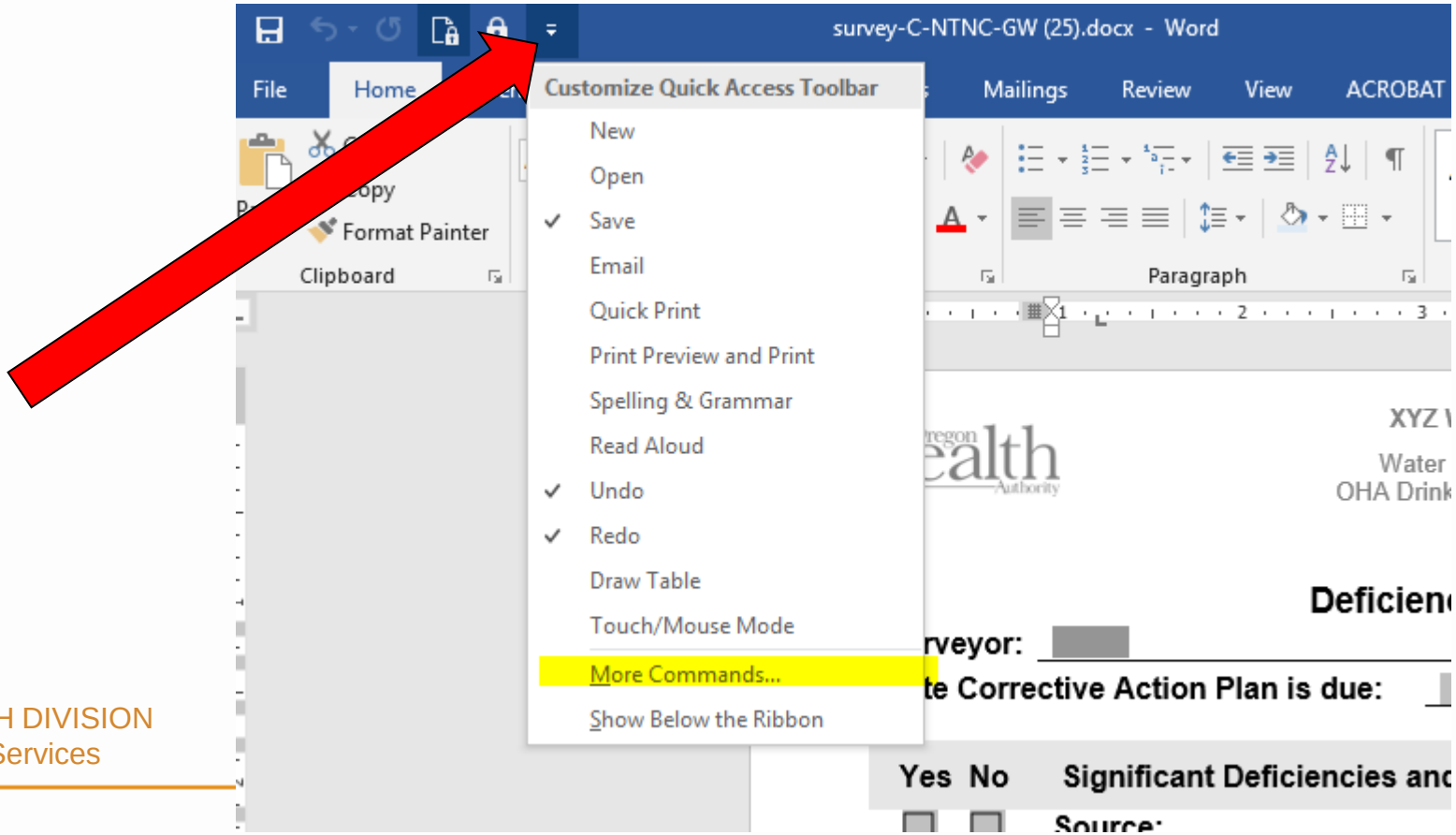
- Click on **RESTRICT EDITING**

- Click on **STOP PROTECTION**



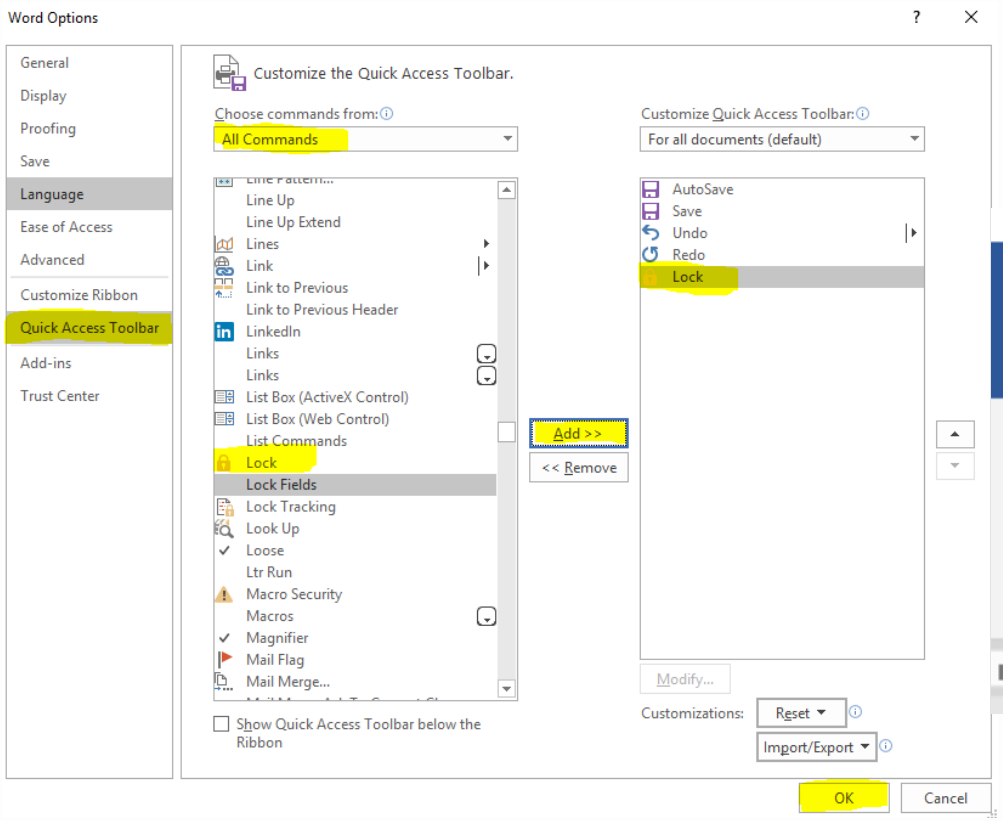
Add Lock / Unlock to Toolbar:

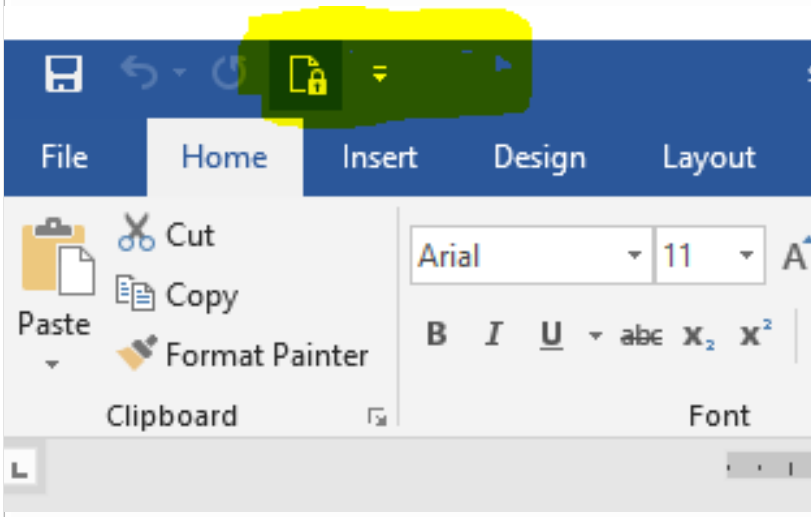
- Click the down arrow to **CUSTOMIZE QUICK ACCESS TOOLBAR**
- Click **MORE COMMANDS**



Select "All Commands" – then scroll to click on "Lock" and then click "Add>>>" then "Ok"

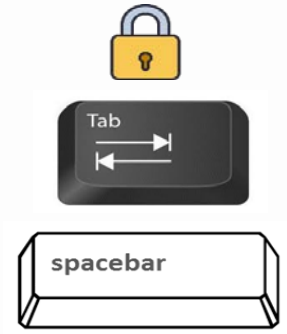
All Commands >>> LOCK >>> Add >>> OK





Oregon Health Authority

Using the tab and space bar



Lock form for editing (allows form field entry)

Use Tab button to jump from entry to entry

Use space bar to click the check boxes

Deficiency Summary

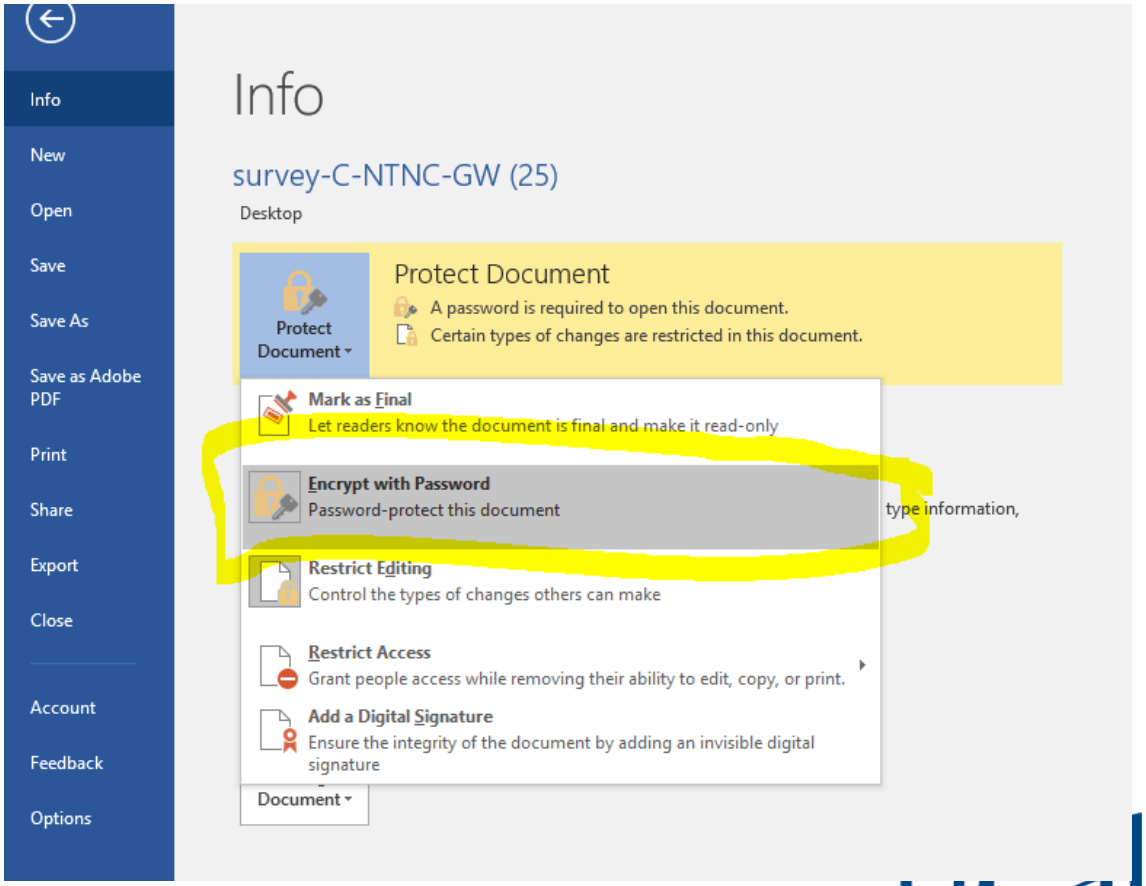
Surveyor: Evan Hofeld

Date Corrective Action Plan is due: 5/31/19 **County:** Polk

Yes	No	Significant Deficiencies and Rule Violations:	Date to be corrected	Date corrected
☒	☐	**Source:** *Well construction:*		

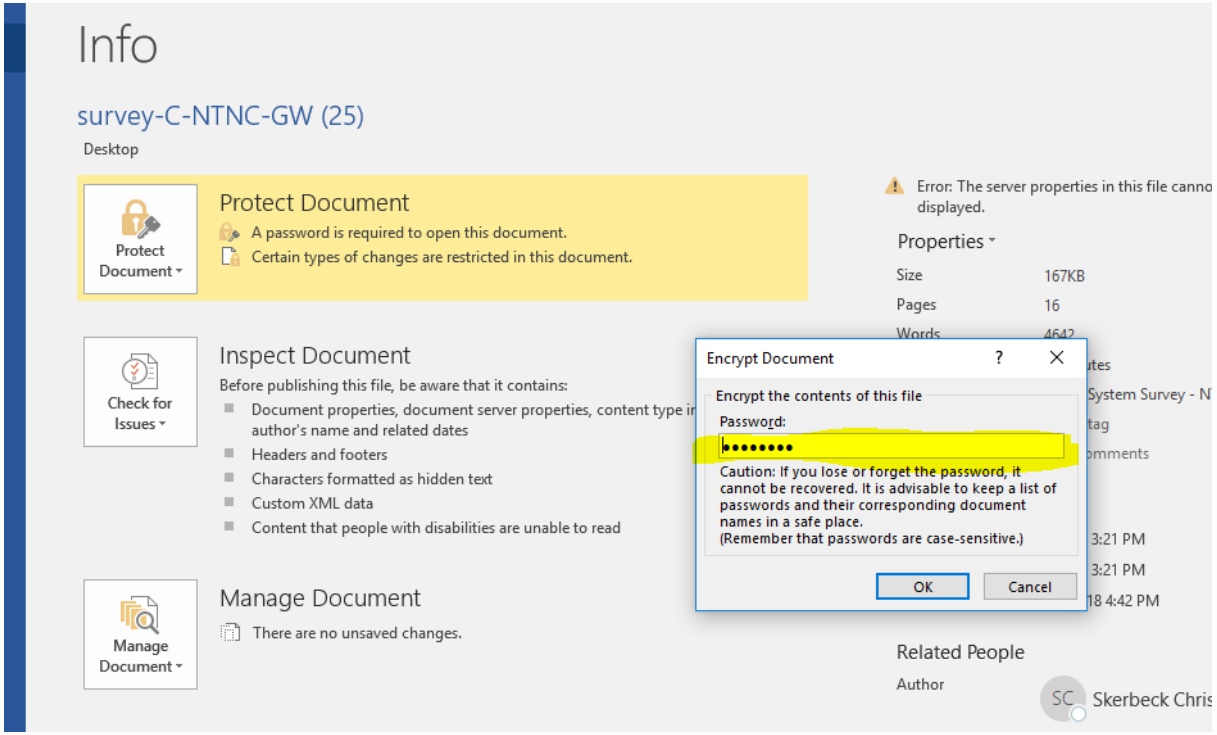
Removing password

- Go to File, Protect Document, Encrypt Password



Removing password

- Delete the password that is in the box

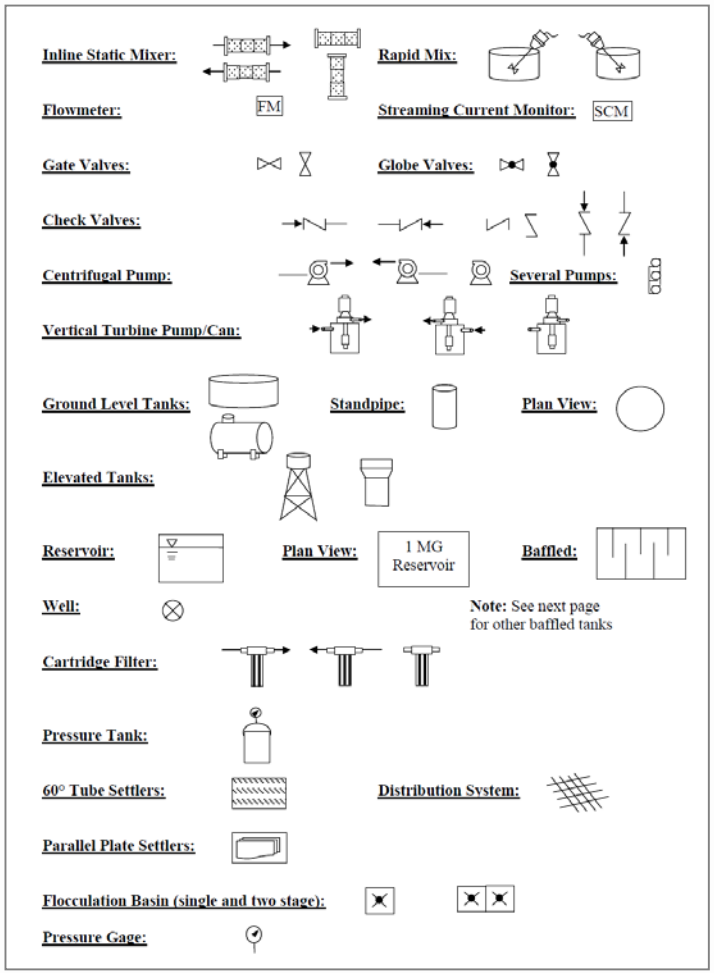


Removing password

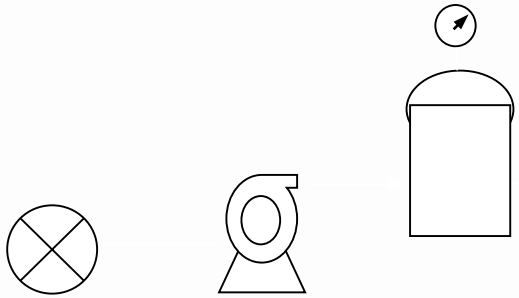
- Click **OK**
- **Save** document as the name you'd like

- Anyone can open the document later without needing a password

Symbols.doc

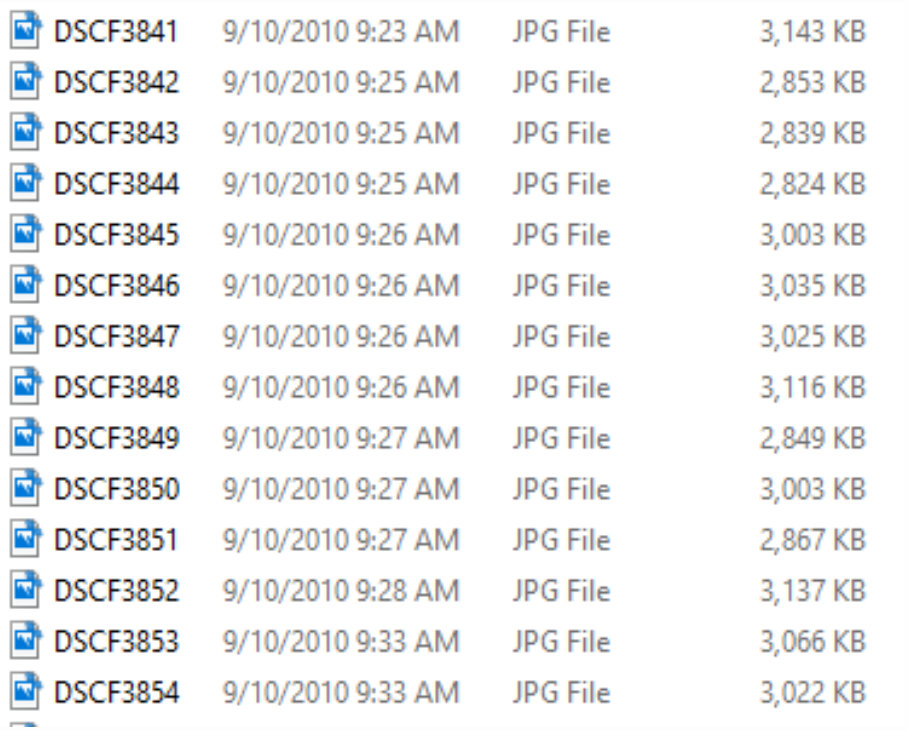


- Pre-made graphics to copy & paste into schematics page
- Easy to move/re-size
- Also contains example schematics



Documenting a survey with photos

- Photos can be a good way to document the facilities, but can also bulk up the survey report and your server unnecessarily

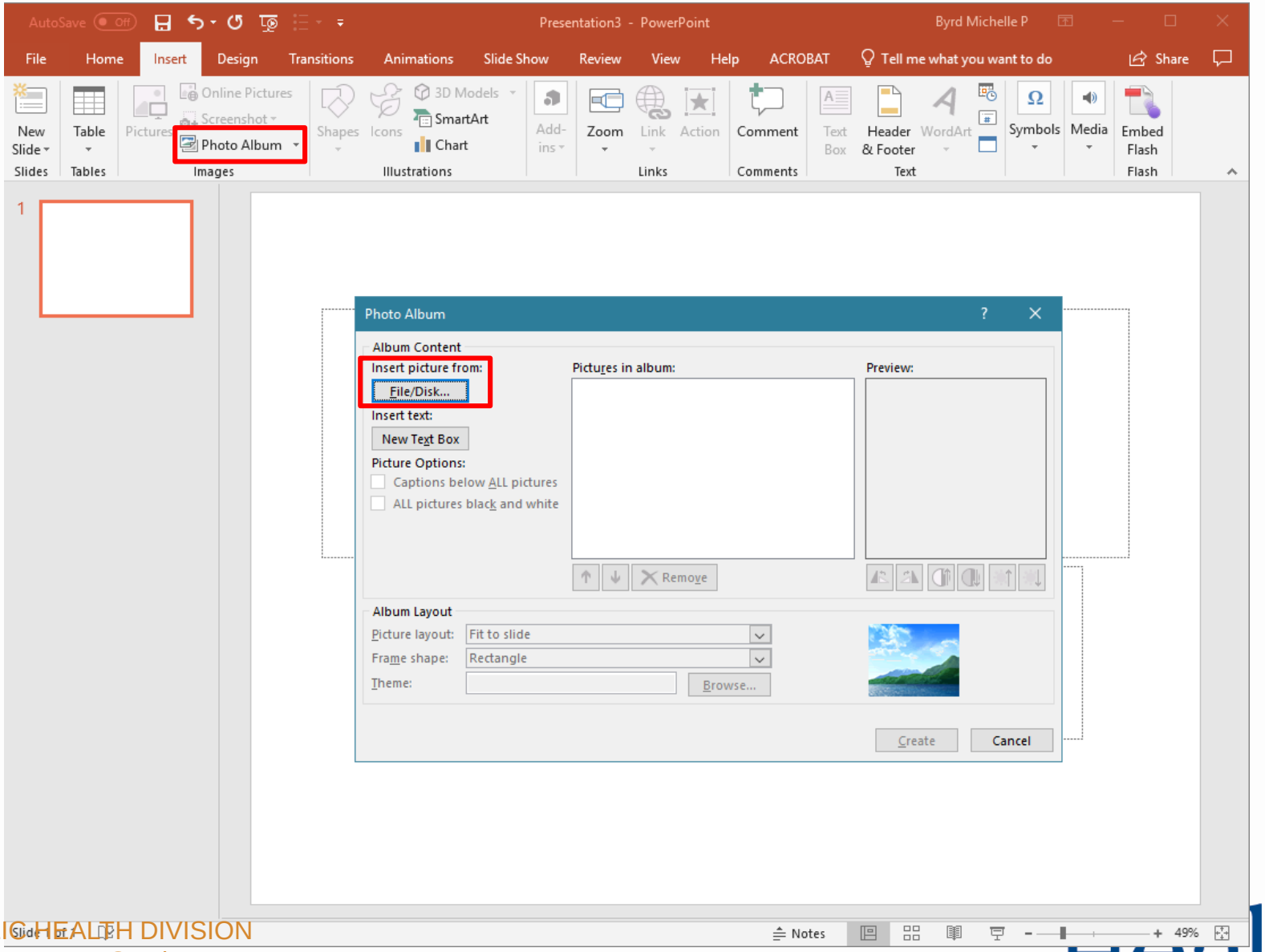


DSCF3841	9/10/2010 9:23 AM	JPG File	3,143 KB
DSCF3842	9/10/2010 9:25 AM	JPG File	2,853 KB
DSCF3843	9/10/2010 9:25 AM	JPG File	2,839 KB
DSCF3844	9/10/2010 9:25 AM	JPG File	2,824 KB
DSCF3845	9/10/2010 9:26 AM	JPG File	3,003 KB
DSCF3846	9/10/2010 9:26 AM	JPG File	3,035 KB
DSCF3847	9/10/2010 9:26 AM	JPG File	3,025 KB
DSCF3848	9/10/2010 9:26 AM	JPG File	3,116 KB
DSCF3849	9/10/2010 9:27 AM	JPG File	2,849 KB
DSCF3850	9/10/2010 9:27 AM	JPG File	3,003 KB
DSCF3851	9/10/2010 9:27 AM	JPG File	2,867 KB
DSCF3852	9/10/2010 9:28 AM	JPG File	3,137 KB
DSCF3853	9/10/2010 9:33 AM	JPG File	3,066 KB
DSCF3854	9/10/2010 9:33 AM	JPG File	3,022 KB

Using PowerPoint for Photos

- PowerPoint has a useful feature that allows you to import photos, organize them on a page and save as a PDF. Here's how:

- Open PowerPoint from your desktop
- Click Blank Presentation
- On menu, click Insert - Photo Album
- In Photo Album, go to Insert picture from and click File/Disk...


Presentation3 - PowerPoint
Byrd Michelle P
File
Home
Insert
Design
Transitions
Animations
Slide Show
Review
View
Help
ACROBAT
Tell me what you want to do
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Icons
3D Models
SmartArt
Chart
Add-ins
Zoom
Link
Action
Comment
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1
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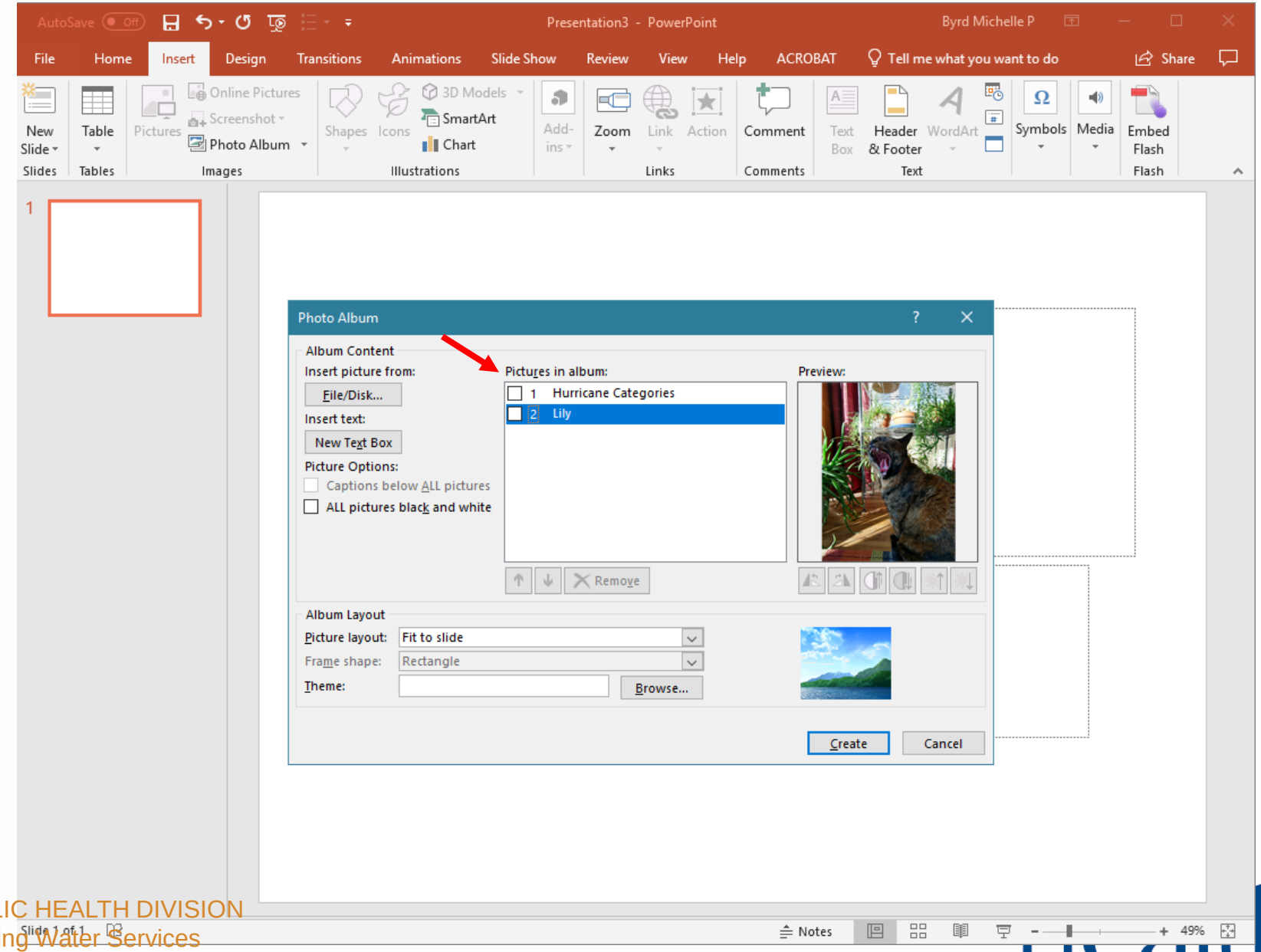
Insert picture from:
File/Disk...
Insert text:
New Text Box
Picture Options:
Captions below ALL pictures
ALL pictures black and white
Pictures in album:
Preview:
Remove
Album Layout
Picture layout:
Fit to slide
Frame shape:
Rectangle
Theme:
Browse...
Create
Cancel
Notes
49%

Using PowerPoint for Photos, cont'd

- Navigate to folder with photos
- Select photos to add
  - *To select multiple photos hold Ctrl key and click photo at same time*
- The selected photos will be listed in Pictures in album section


AutoSave
Presentation3 - PowerPoint
Byrd Michelle P
File
Home
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Design
Transitions
Animations
Slide Show
Review
View
Help
ACROBAT
Tell me what you want to do
Share
New Slide
Table
Pictures
Online Pictures
Screenshot
Photo Album
Shapes
Icons
3D Models
SmartArt
Chart
Add-ins
Zoom
Link
Action
Comment
Text Box
Header & Footer
WordArt
Symbols
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Links
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New Text Box
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Captions below ALL pictures
ALL pictures black and white
Pictures in album:
1 Hurricane Categories
2 Lily
Remove
Preview:
Album Layout
Picture layout:
Fit to slide
Frame shape:
Rectangle
Theme:
Browse...
Create
Cancel
Slide 1 of 1
Notes
49%

Using PowerPoint for Photos, cont'd

- A cover page will be created. You can delete this.
- To change background color go to Design - Customize - Format Background - click on color.
- To change format from landscape to portrait go to Design - Slide Size - Custom Size - Orientation slides and select Portrait.
- Name photos before adding them to album
- Album can be customized to meet your needs!

AutoSave Off

Presentation4 - PowerPoint

Byrd Michelle P

File Home Insert Design Transitions Animations Slide Show Review View Help ACROBAT Tell me what you want to do Share

Themes Variants Customize Designer

Slide Size Format Background Design Ideas

1

2

Hurricane Categories

Lily

Click to add notes

Format Background

Fill

Solid fill
Gradient fill
Picture or texture fill
Pattern fill
Hide background graphics

Color

Transparency 0%

Apply to All Reset Background

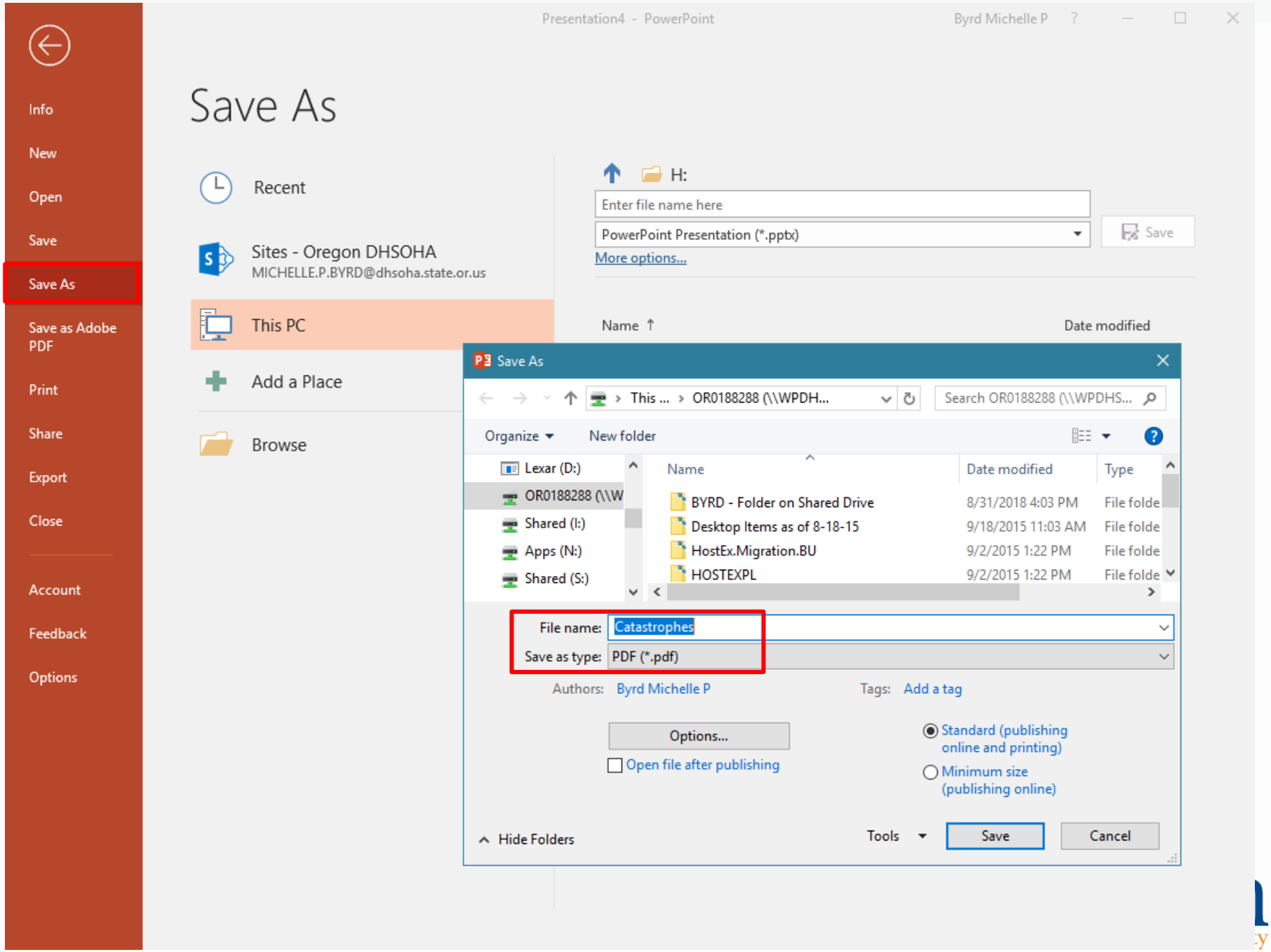
Slide 2 of 2

Notes

67%

Using PowerPoint for Photos, cont'd

- To export file as PDF go to File on menu
- Click Save As
- Navigate to where file should be saved
- Change name file
- Under Save as type choose PDF from dropdown list
- Open PDF file to make sure it looks okay


Presentation4 - PowerPoint
Byrd Michelle P
Info
New
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MICHELLE.P.BYRD@dhsoha.state.or.us
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PowerPoint Presentation (*.pptx)
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BYRD - Folder on Shared Drive
8/31/2018 4:03 PM
File folde
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File folde
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File name:
Catastrophes
Save as type:
PDF (*.pdf)
Authors:
Byrd Michelle P
Tags:
Add a tag
Options...
Open file after publishing
Standard (publishing online and printing)
Minimum size (publishing online)
Hide Folders
Tools
Save
Cancel

Catastrophes.pdf - Adobe Acrobat Reader 2017

File Edit View Window Help

Home Tools Catastrophes.pdf × Sign In

2 / 2 85.3%

Hurricane Categories

Lily

Need help?

Contact: Michelle Byrd

michelle.p.byrd@st

Outstanding Performer status

- If the Fee bill passes, DWS will likely no longer charge a survey fee.
- The fee provided an incentive for systems to become Ops (in addition to the glory).
- Other ideas on incentives??

Reminders - report

- Use the cover letter template!
- Check your survey report and letter to make sure black dot items, checklist, and letter match!
- Have your DWS contact review your survey if not yet cleared

Dear :

Thank you for your time and assistance in conducting a **Water System Survey at [Water System Name] on [Date of Survey]**. The main purpose of the survey is to evaluate the entire water system in terms of supplying safe drinking water to the public. I have enclosed a copy of the report for your records. Please let me know if any corrections need to be made.

Example Language - if deficiencies are found:

The first page of the report lists significant deficiencies and rule violations in the system that will have to be corrected as soon as possible. You must contact me within 30 days and correct all deficiencies and violations by **[18 weeks from the date of this letter]**, or be on an approved

Reminders - training

- Partners are responsible for on-boarding new employees to drinking water work.
- DWS can accompany a new REHS on a survey, meet up to ask questions, etc

Web resources

Survey Manual and Related Information

- Water System Survey Reference Manual - *revised 10/17/2018*
- Symbols for Schematics and Sample Water System Schematics
- Counting Population and Connections for a Public Water System
- Chemical Monitoring Schedules for Community and Non-Transient Non-Community groundwater systems
- Standard Monitoring Framework - to assist with completing the water quality monitoring page of the survey
- Outstanding Performance
- Deficiency List - *revised 6/24/2015*
- Setback Issues Found in a Survey - Procedure - *New 12/15/2015*
- Membrane Survey Staff Guide - *New 12/20/17*

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Templates for Survey Cover Letters

- Community Groundwater Systems - includes outstanding performer information language
- NTNC, TNC, and Non-EPA Groundwater Systems
- Community Surface Water Systems - includes outstanding performer information language
- NTNC, TNC, and Non-EPA Surface Water Systems

Past presentations & Resources

- Survey Basics 2017 Fall Training (recording on-line)
- Partner Resources: Training and Conferences
  - 2016 Silver Falls New Survey Forms
  - 2016 Fall Survey Forms and Contact Reports
  - 2017 Silver Falls Survey Review**
  - 2017 Fall Survey forms tips and tricks**
  - 2018 Fall Survey Basics (webinar)

Other survey questions?

Kari Salis, PE
Technical Manager
971-673-0423
Karyl.l.salis@state.or.us