

Kahoot!

- ▶ Wi-Fi Password: **3Revents!**
- ▶ Go to: <https://kahoot.it/>
- ▶ Enter Pin
- ▶ Refresh if you don't see your answers on the screen after submitting
- ▶ Have Fun

<https://play.kahoot.it/v2/lobby?quizId=acb2332e-9786-4a3f-8db2-ad1ef5ab6cf9>

City of Anacortes
Public Works

SWIFT COMPLY

System Dashboard ▼ Set as Default

1588
Active Backflow Assemblies

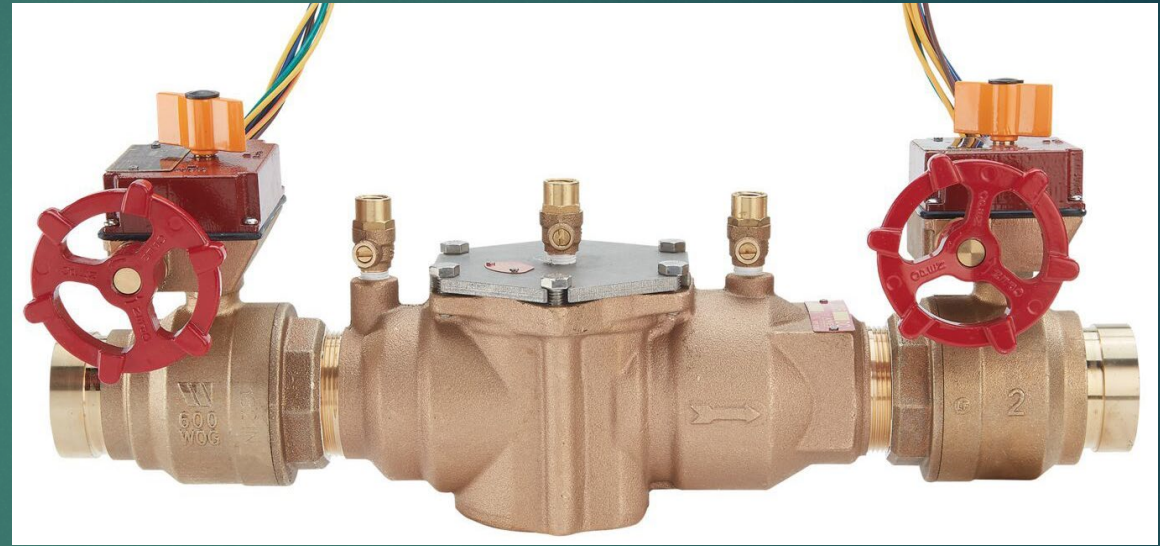
969
Total Locations

Non-Compliant Assemblies

Type	Serial Number
DCDA	0001311006
DCDA	0007141
DCDA	001017110
DCDA	0010201332
DC	001756
DC	002444
DC	003245

Cross-connection Control Program: Breaking the Information Silos

Cross-connection Control
Program Update Project



CITY OF ANACORTES
PUBLIC WORKS



Kahoot: What are your objectives today?

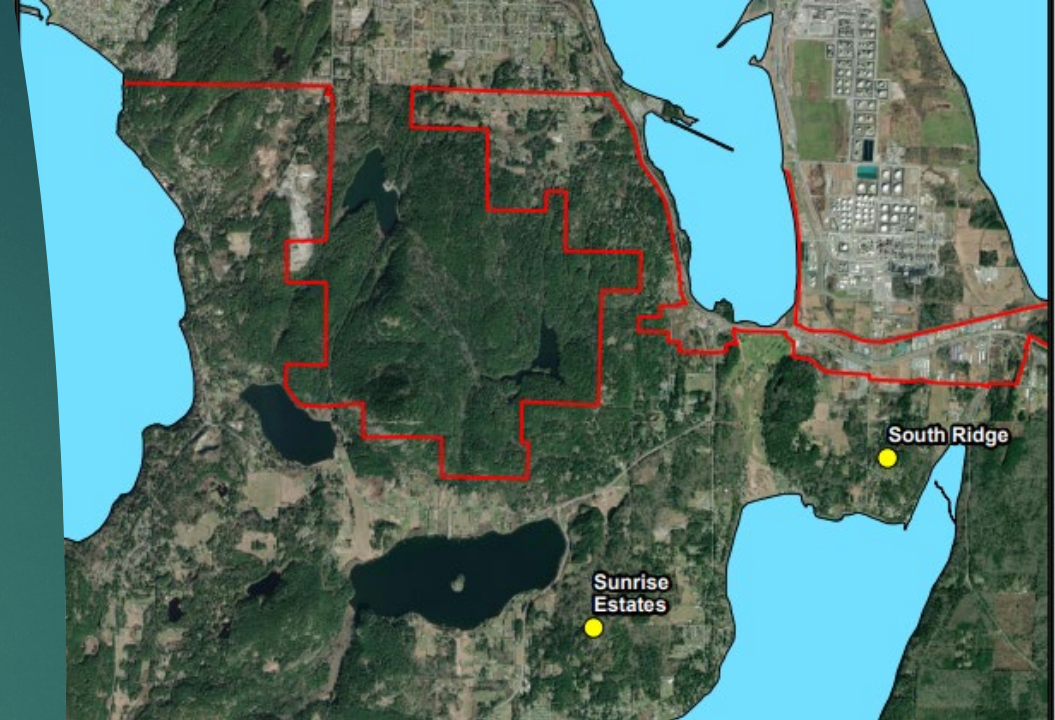


Brian McDaniel Water System Manager
Terry Nemeth Water Distribution Supervisor
Joan Pringle Public Works Administrative Assistant

Objectives for Today

- ▶ Observe how internal silos can be dissolved to protect the potable drinking water
 - ▶ Silos and what are they?
- ▶ Lessons learned from historical reporting data gaps
- ▶ Write a note to yourself

Kahoot: What's your trade?



City of Anacortes Water System

- ▶ City owned regional water treatment plant
 - ▶ Water source: Skagit River
 - ▶ Daily capacity: 43 million gallons, expandable to 55 million gallons
 - ▶ Serves approximately 56,000 residential, commercial, and industrial customers
 - ▶ Wholesale customers:
 - ▶ Skagit PUD
 - ▶ Town of La Conner
 - ▶ Swinomish Tribal Community
 - ▶ City of Oak Harbor (Naval Air Station Whidbey Island)
 - ▶ Industrial customers
 - ▶ Marathon refinery
 - ▶ Holly Frontier refinery
- ▶ City population: 17,832
- ▶ Cross-connections assemblies: 1,588



Kahoot: How many assemblies do you test or serve?

CCC for High-Hazard Premises

Reporting Year	Number Served	Protected by AG or RP	Exceptions Granted	Unprotected	Percent Protected
2020	186	112	0	74	60%
2019	112	112	0	0	100%
2018	112	112	0	0	100%
2017	114	114	0	0	100%
2016	117	117	0	0	100%

PWS's are expected to have 100% protection of High Hazard Premises (WAC 246-290-490(4)).

Backflow Preventer Inspection and Testing Data

Reporting Year	Number of Assemblies	Assemblies Tested	Percentage Tested and Inspected
2020	1493	1172	78%
2019	1481	1282	86%
2018	1407	1142	81%
2017	1358	1162	85%
2016	1308	1187	90%

Inspection and testing of backflow assemblies, air gaps, and AVB's is vital for proper operation and protection (WAC 246-290-490(7)). Public Health performance goal is 100% testing.

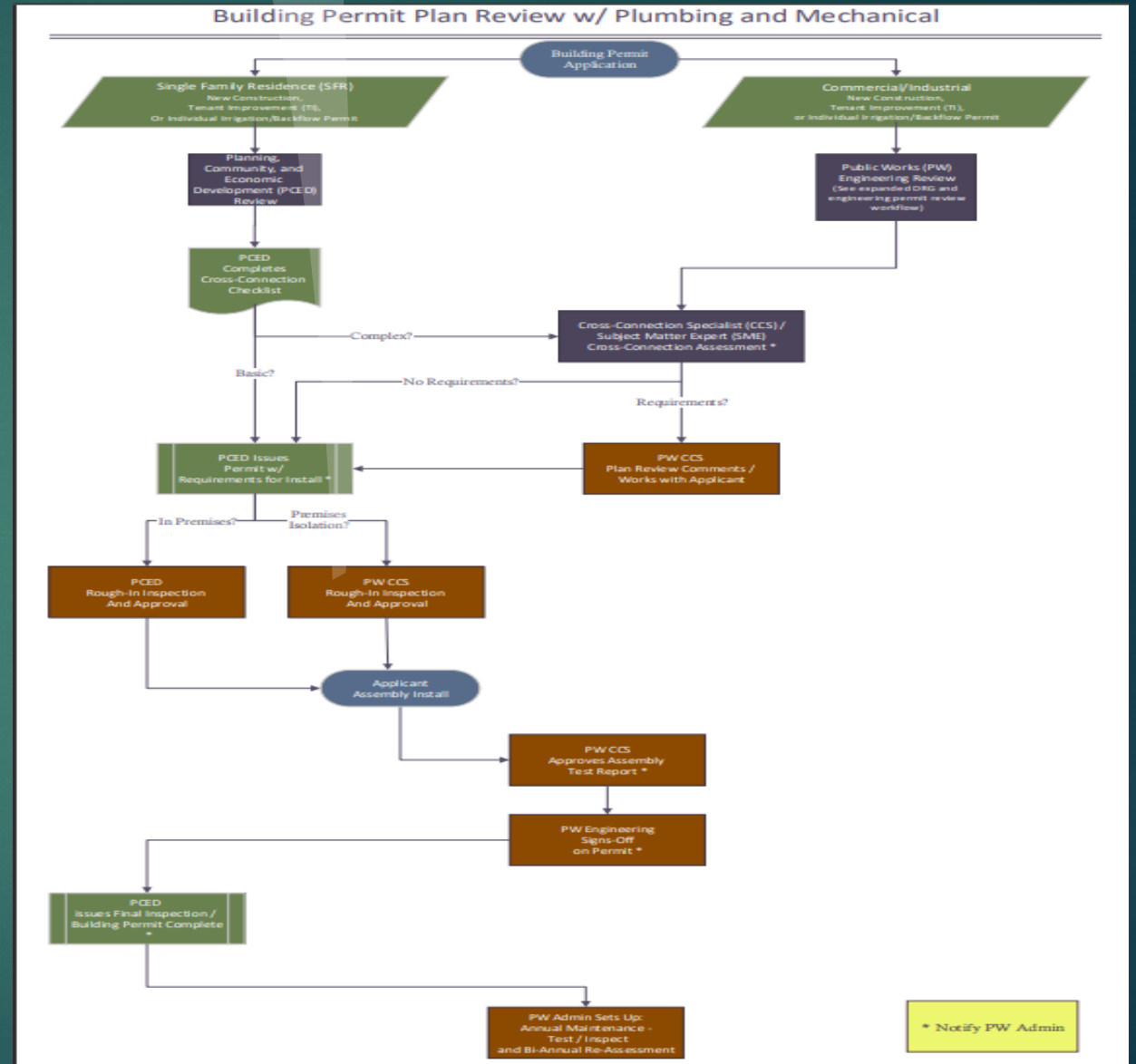
Hazard Surveys

What are we trying to solve?

- ▶ Data inconsistencies
- ▶ Assembly installation requirements
- ▶ High-hazard evaluations
- ▶ Testing compliance
- ▶ Protecting the drinking water!

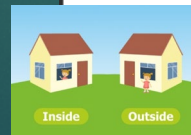
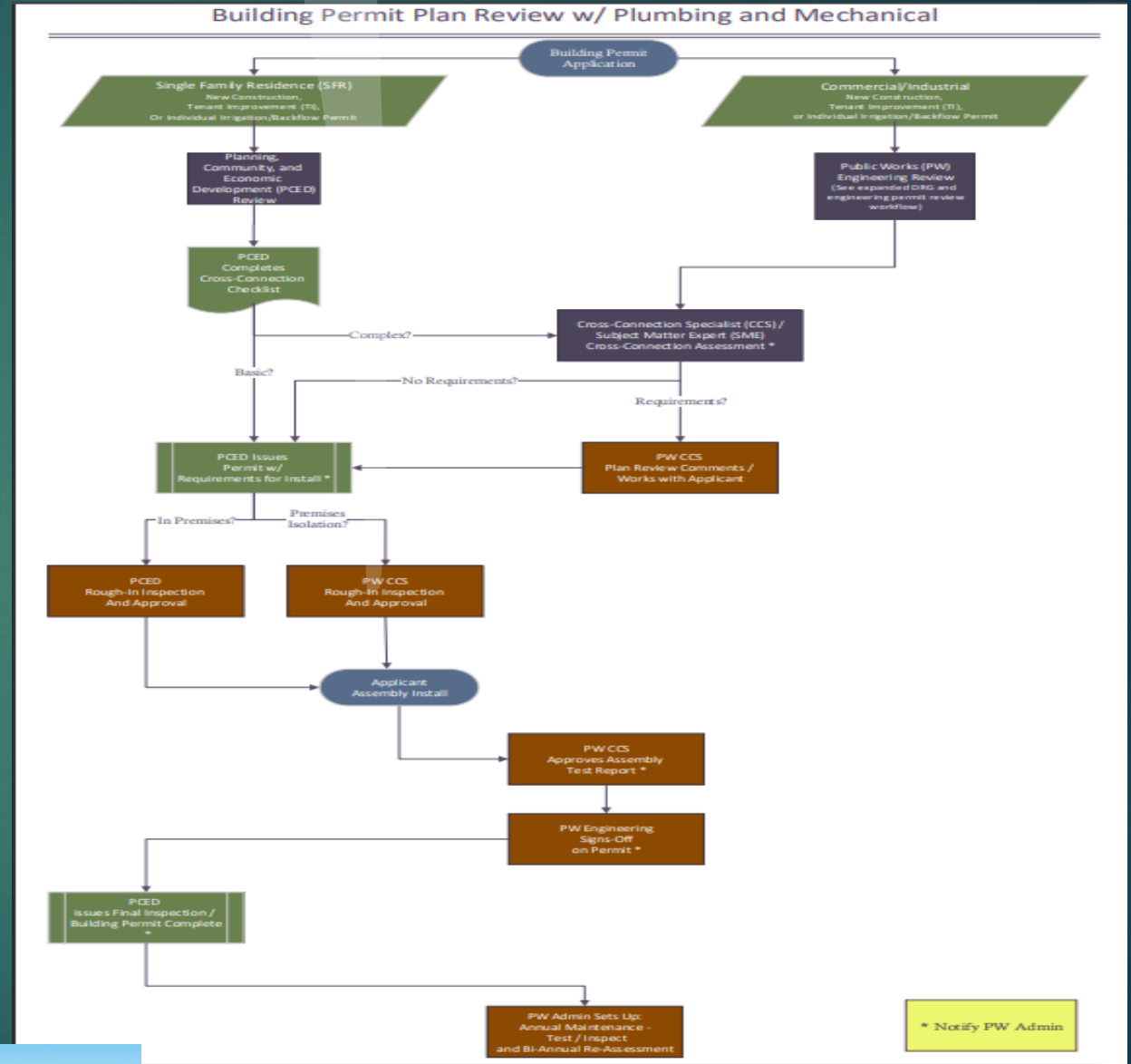
Stakeholders/ Potential Silos

- ▶ Building and Planning Officials
 - ▶ Local
 - ▶ County
 - ▶ Other
- ▶ Public Works
 - ▶ Engineering Department
 - ▶ Operational staff
- ▶ Finance Department
- ▶ Fire Officials
 - ▶ Local
 - ▶ County



Establish Legal Authority

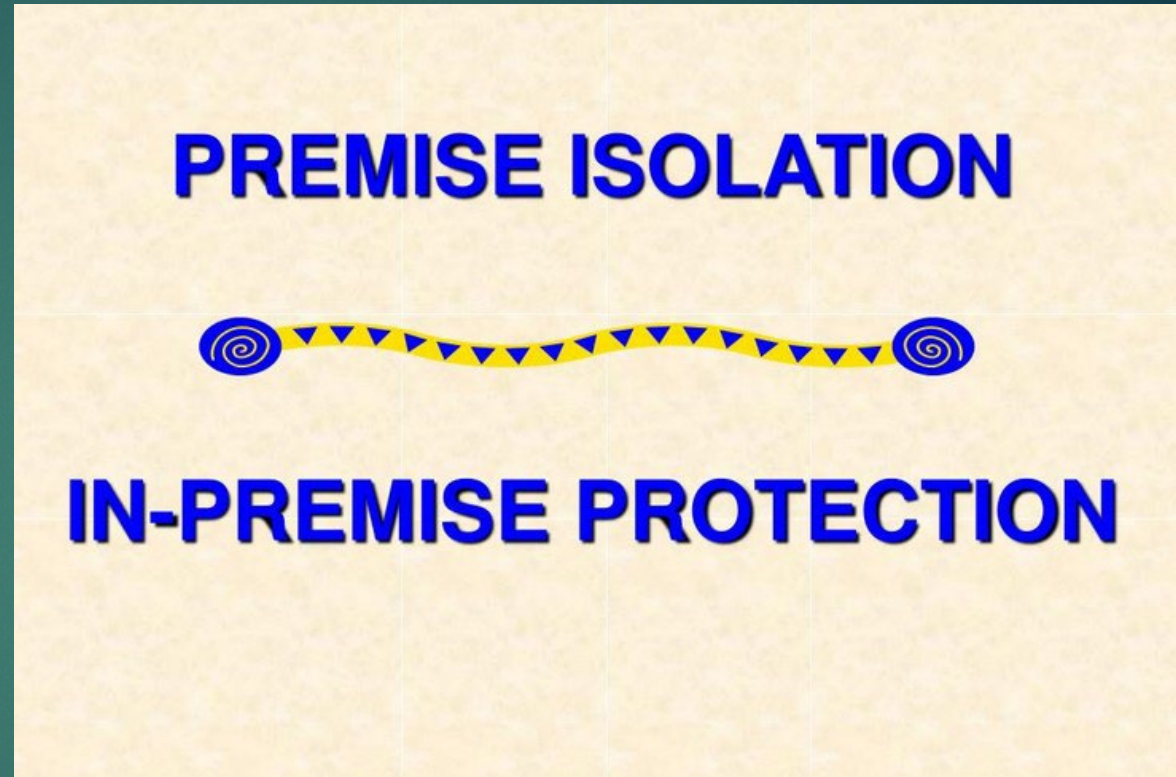
- ▶ Ordinance, By-law, HOA, etc.
- ▶ Defining program
 - ▶ Premises Isolation Only
 - ▶ Combination (Premise/In-premise protection)



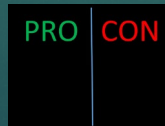
Kahoot: What type of program do you have?

Pros/Cons of Each (Discussion)

- ▶ Combination
- ▶ Premises



What are the pros of a combination program?
What are the cons of a combination program?



An Agreement

- ▶ “The Why“ Statement
- ▶ Jurisdiction having authority
- ▶ Responsibilities
- ▶ Activities



Memo

Date: October 7, 2021

To: Fred Buckenmeyer, Public Works & Engineering Director

From: Don Measamer, Planning, Community & Economic Development Director

Re: Cross-connection Control Program agreement between City of Anacortes Planning, Community & Economic Development Department and Public Works Department

Objective:

Outline responsibilities and establish workflows of the City of Anacortes Planning, Community & Economic Development (PCED) and Public Works (PW) water utility to protect the public drinking water through the city's Cross-connection Control Program (CCP). City of Anacortes Code 13.24.020; [WAC 246-290-490](#)

Background:

The Washington State Department of Health (DOH) requires public water systems to develop a CCP to reduce the risk of a potential water system contamination via a cross-connection. The City of Anacortes operates a CCP as a “combination program,” meaning the program may accept appropriate backflow prevention protection within the property in lieu of application of separation at the point of delivery. The program relies on applied procedures and practices that go beyond the point of required delivery, which is the outlet of the service connection or the end of the water meter.

The program relies on two types of applied backflow protection:

- Backflow protection practices applied at the point of delivery or at the property line are considered “premises isolation.”
- Assemblies or backflow protection practices within the property are considered “in-premises” protection.

Because the City's adopted CCP includes policies and procedures that fall under the control of both PCED and the DOH certified Cross Connection Specialist (CCS) within PW, this agreement between the two departments intends to delineate roles, responsibilities and establish clear jurisdictional boundaries.

An Agreement

- ▶ Jurisdiction having authority
 - ▶ Defining who has authority In the building, outside the building
 - ▶ When exceptions happen

Jurisdictions:

PCED jurisdiction starts at the property line and includes all buildings, structures, and mechanical systems within the property.

PW jurisdiction falls within the public right of way with all potable water piping and appurtenances up to the point of delivery. PW jurisdictional responsibility also includes the water system storage and distribution system up to the downstream connection of the premises isolation backflow assembly, which may be located on private property.

Exceptions, which permit PW to accept cross-connection control measures beyond the end of the service connection, will be accomplished through this agreement between PCED and PW.

An Agreement

▶ Responsibilities

- ▶ Documentation process
- ▶ Responsibility for the survey
- ▶ Enforcement actions
- ▶ Dual - responsibility

Responsibilities:

PCED will be responsible for:

- providing inspection and testing records to PW for tracking purposes
- responding to written complaints of work performed without required permits (PCED **does not** perform hazard evaluations/inspections/surveys for potential cross connections of properties that have not obtained a permit unless responding to a written complaint. PCED will notify the CCS of such written complaints.)

PW will be responsible for:

- coordinating program implementation activities
- inspecting and tracking maintenance activities for premises isolation backflow protection
- keeping inspection and testing records for premises and in-premises backflow assemblies
- approving all locations for premises isolation backflow protection
- performing periodic hazard evaluations/inspections/surveys of properties for potential cross connections as referenced with the written program
- maintaining assembly records for assemblies beyond premises isolation (however, it will be the responsibility of PCED to take appropriate enforcement actions for non-compliance)

PW and PCED will be responsible for:

- Performing inspections for proper installation of premise/in-premise isolation backflow protection

Kahoots

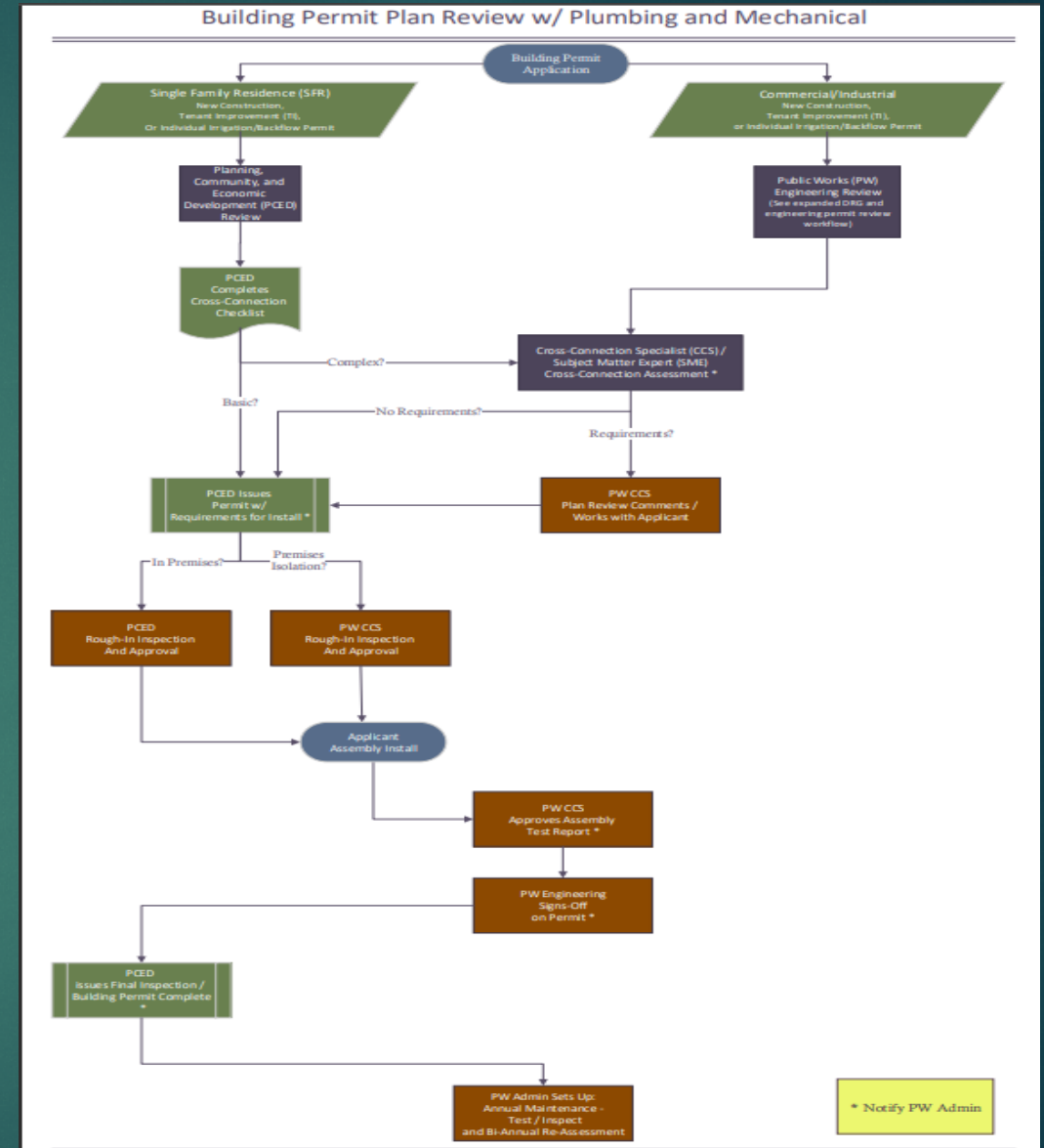
How robust is your building department agreement?



New assembly inspection records –
Where should they be sent?

Putting it into action

- ▶ Identify Business process
- ▶ Document workflow design
- ▶ Review with stakeholders



Making an Action

Laserfiche Forms™ Inbox **Start Process** Reports Design Manage Monitor

Search processes

Process ▲	Description	
☆ Water Service Hazard Survey	City staff from Building, Finance or Water departments initiate a survey	Start
☆ WCIA Incident Report	Employee submits report of any event or condition that may result in a claim agai...	Start
☆ WTP Leave Request	WTP Staff submit request for leave	Start
☆ WTP Purchase Order	WTP staff submit Excel PO to supervisor and plant manager for approval	Start

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Making an Action

None of the above

Requirements

Existing Protection*

Premises In Premises Both None

Premises Isolation Required?*

Yes
 None

Area Isolation Required?*

Yes
 None

In Premises Required*

Yes
 None

Premises Protection Required

	Preventer Type*	Downstream Use*
1	RPBA	commercial building

New required protection must be installed by*

2022-06-03

CCS Notes

Animal Institution with limited access



Water Service Hazard Survey

Installation or modification to water service connections triggers Certified Cross Connection Specialist survey for cross-connection hazards to the public water system and tracking of final installation and testing of any required backflow prevention to protect the public water service.

Type of Survey*

Initiated By

Survey Date*

Date will be captured on form submission

Account Type*

Commercial/Industrial Residential/Multi-Use

Service Location*

In City Outside City

Street Name*

Street Number*

Service Address*

Account Status*

New Existing

Account Purpose*

Building Permit Number*

Building Permit Drawings*

Rich text editor toolbar with icons for bold, italic, underline, font color, background color, bulleted list, numbered list, indent, outdent, link, unlink, image, video, table, code, and help.

Enter the location of building permit application files and drawings that the CCS will need to review to determine if backflow prevention is required, ideally as one or more hyperlinks.

Hazards On Site (check all that apply)*

- Waterfront
- Pool
- Spa
- Private well
- Sewage pump
- Storm pump
- Recreational vehicle connection
- Irrigation
- Livestock
- None of the above

Hazards In Building (check all that apply)*


- Boiler system
- Fire suppression system (water connected)
- Floor heat
- Post-carbonated dispenser
- Water reuse system/water reclamation
- Water softener or water treatment/filtration
- None of the above

Submit

Save as Draft

Making an Action

- ▶ Tracking software
- ▶ Online test report submittal
- ▶ Tracking compliance
- ▶ Leveraging one system
- ▶ ONLINE Testing Report Submittal Discussion



Water Service Hazard Survey

Installation or modification to water service connections triggers Certified Cross Connection Specialist survey for cross-connection hazards to the public water system and tracking of final installation and testing of any required backflow prevention to protect the public water service.

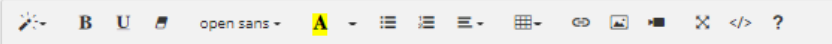
Type of Survey* Initiated By Survey Date* Date will be captured on form submission

Account Type* Commercial/Industrial Residential/Multi-Use Service Location* In City Outside City

Street Name* Street Number* Service Address*

Account Status* New Existing Account Purpose*


Building Permit Number*

Building Permit Drawings* 
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Hazards On Site (check all that apply)*	Hazards In Building (check all that apply)*
<input type="checkbox"/> Waterfront	<input type="checkbox"/> Boiler system
<input type="checkbox"/> Pool	<input type="checkbox"/> Fire suppression system (water connected)
<input type="checkbox"/> Spa	<input type="checkbox"/> Floor heat
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<input type="checkbox"/> Sewage pump	<input type="checkbox"/> Water reuse system/water reclamation
<input type="checkbox"/> Storm pump	<input type="checkbox"/> Water softener or water treatment/filtration
<input type="checkbox"/> Recreational vehicle connection	<input type="checkbox"/> None of the above
<input type="checkbox"/> Irrigation	
<input type="checkbox"/> Livestock	
<input type="checkbox"/> None of the above	

Bringing it together discussion

- ▶ Customers that are not sent notices from utility to test
- ▶ Comments not addressed on test reports
- ▶ Requirement to test in-premises valves behind a premises valve
- ▶ Handling change of use – Single family residence to commercial B&B
- ▶ Sample Workflow may help guide your decision

 **Water Service Hazard Survey**
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Hazards On Site (check all that apply)* Waterfront Pool Spa Private well Sewage pump Storm pump Recreational vehicle connection Irrigation Livestock None of the above

Hazards In Building (check all that apply)* Boiler system Fire suppression system (water connected) Floor heat Post-carbonated dispenser Water reuse system/water reclamation Water softener or water treatment/filtration None of the above

Questions?



Kahoot: Did we meet
your objectives?



Thank You

CITY OF ANACORTES
PUBLIC WORKS



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