

### STUDENT HANDOUT – UNIT 2: EMERALD CITY FLOOD SCENARIO

#### Purpose:

The purpose of this activity is to provide you an opportunity to apply what you have learned about fundamental ICS concepts to an incident involving a flood that has the potential to cause severe property damage and endanger human life.

#### Instructions:

Work in teams to complete the following activity:

1. Review the scenario, scenario map, and resource list on your handouts.
2. Complete the following steps:
  - Identify who would assume leadership of the ICS organization.
  - Develop initial incident priorities and SMART objectives.
  - Draw an organizational chart to support the objectives and manage resources. Your organization should maintain an effective span of control and include Command and General Staff, where appropriate.
  - Describe the responsibilities delegated to the Command Staff and Sections that are activated.
3. Record your results on chart paper that can be seen by the entire class.
4. Select a spokesperson and be prepared to present in 30 minutes.

**Scenario-based activities are designed to help you apply what you are learning in this course. Although based on actual incidents, the scenarios have been altered to ensure that certain teaching points can be emphasized and work with the timeframe allocated. Therefore, the events and timing may differ from how you might experience the incident evolving in your jurisdiction or agency. It is important to focus on the learning activities rather than the details of the scenarios.**

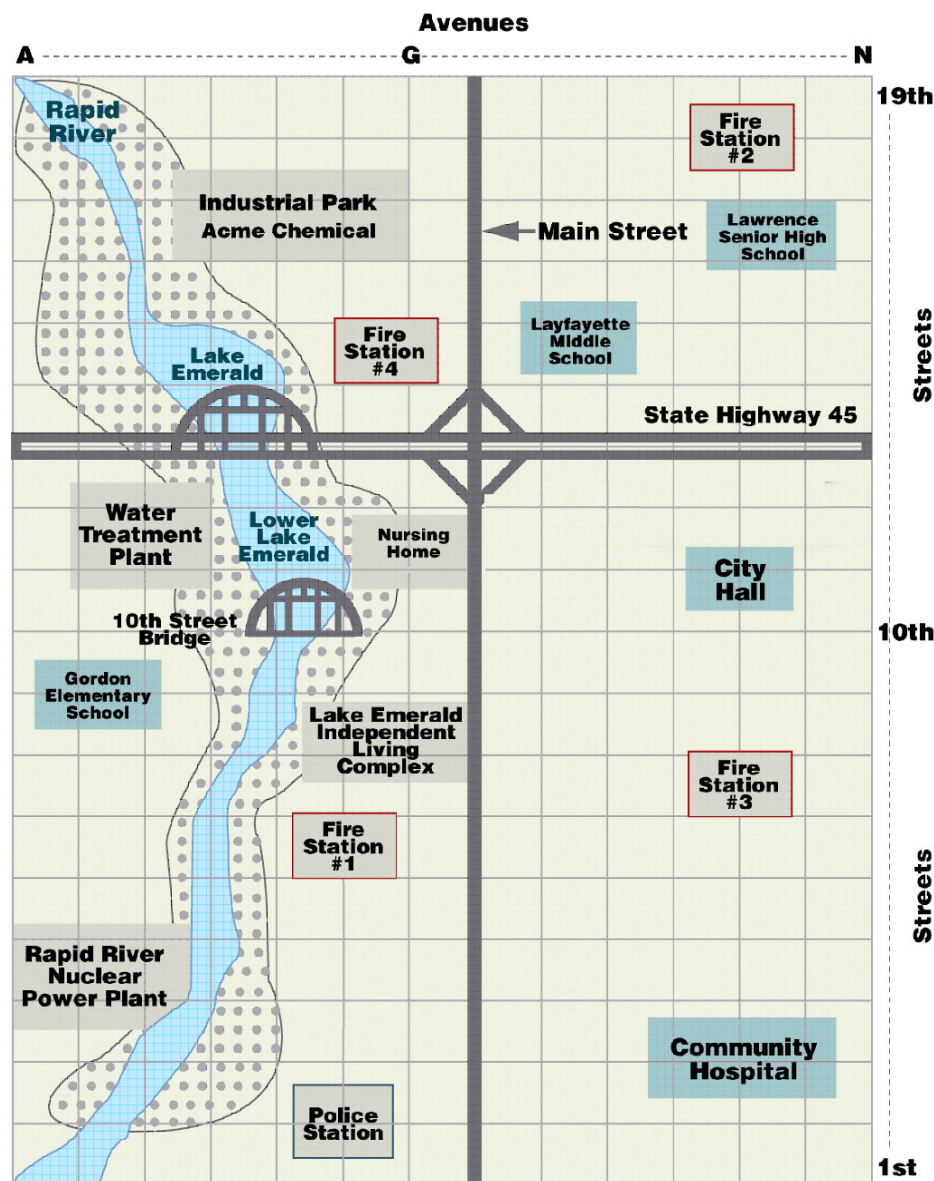
## Unit 2. ICS Fundamentals Review

### Scenario:

For the past three days, it has been raining heavily in Emerald City, averaging 1.3 inches of rain each 24-hour period. Emerald City is located on the banks of the Rapid River and along Lake Emerald. The city has a history of being susceptible to floods and tornadoes.

In an effort to avoid some of the damage and loss of life caused by previous incidents, the newly elected mayor of Emerald City has taken an active interest in planning for and responding to these disasters. The mayor has asked you to prepare a staffing plan for the response to anticipated flooding, in the event that the rains do not abate.

### Map:



**STUDENT HANDOUT – UNIT 3: EMERALD CITY FLOOD SCENARIO**

**Purpose:**

The purpose of this activity is to provide you the opportunity to apply what you have learned about Unified Command.

**Instructions:**

Work in teams to complete the following activity:

1. Review the scenario update and resources list.
2. Complete the following steps:
  - List who would be included in the Unified Command structure and draw an organizational chart.
  - Identify the issues facing the development of the Unified Command structure.
  - Describe the strategies the Unified Command structure will use to address these challenges and facilitate information flow and coordination.
3. Select a spokesperson and be prepared to present your work in 30 minutes.

### Scenario Update:

At 1200 on August 4th, Emerald City Emergency Management is preparing for a response to a possible flood situation in the northwest quadrant of the city. It has now been raining heavily for the past 7 days, averaging 1.3 inches of rain each 24-hour period.

Residents are starting to ask questions about the rising river and lake levels and wondering if they will need to leave their homes.

### Resources:

#### **Law Enforcement:**

Sheriff Department	(10) patrol units with 2 deputies
Metropolis State Police	(2) patrol units with 2 State troopers

#### **State Department of Transportation:**

Road Supervisor	(1) with pickup truck
Maintenance Workers	(4) 2-person crews
Programmable Road Signs	(2) mobile programmable road signs
Dump Trucks	(8) single-axle dump trucks
Backhoe	(2) wheeled backhoe/frontend loaders
Excavator	(1) tracked hydraulic excavator with transport
Bulldozer	(2) bulldozers (e.g., JD 650)

#### **Fire Department:**

Fire Station #1	(2) Type 1 engines and 8 firefighters/EMTs
Fire Stations #2 and #3	(2) Type 1 engines with 6 firefighters/EMTs
Fire Station #4	(1) Special Response Unit and a 4-person Dive Team

#### **Emergency Medical Services:**

Emerald City Rescue Squad	(2) Type 2 ambulances with 4 paramedics
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#### **Local Resources Alerted:**

American Red Cross  
Salvation Army

### Critical Issues:

- Provide for the safety of affected residents through warning, evacuation, and sheltering.
- Monitor critical infrastructure for damage from rising floodwaters.
- Ensure that timely and accurate public information is disseminated.
- Continue to provide basic services such as clean water, electricity, and telephone service.
- Ensure the safety of all responders, citizens, and the media.

### STUDENT HANDOUT – UNIT 4: EMERALD CITY FLOOD SCENARIO

#### Purpose:

This activity will provide practical instruction on the methods and tools used to assess incident/event complexity. It focuses on the following issues:

- Types of agency policies and guidelines that influence management of incident or event activities.
- Processes for developing incident objectives, strategies, and tactics.
- Steps in transferring and assuming incident command.
- Incident objectives.

#### Instructions:

Work in teams to complete the following activity:

1. Review the scenario update in your handouts.
2. Assign an Incident Commander to the Unified Command, Safety Officer, Public Information Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief. If there are enough people in your group, you may also assign a Liaison Officer.
3. Develop incident objectives for the next operational period and revise the organization as needed. Document your objectives and organization on chart paper and the partially completed ICS Form 201. Make sure your objectives are SMART!
4. Complete the missing element within ICS Form 201.
5. By position, identify issues related to the incident.
6. Select a spokesperson and be prepared to share your work in 30 minutes.

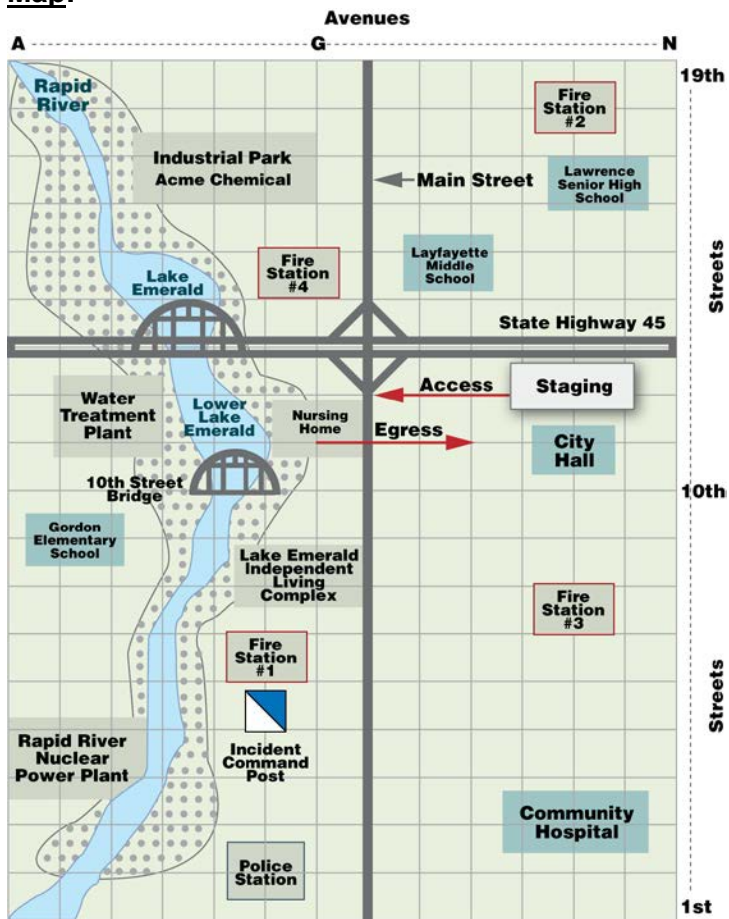
### Scenario Update:

The National Weather Service has just informed the County Emergency Management Office that the flooding is expected to crest at 1800 today. It is expected that this flood crest will cause flooding as indicated on the projected floodplain map.

Residents in the area north of the Tenth Street Bridge from Main Street on the east to Avenue A on the west are being asked to evacuate their homes in anticipation that the rising floodwaters may cut off access to and egress from their homes. Basement flooding to the first-floor level is anticipated. This evacuation area extends north to 19th Street. County Emergency Management is in contact with business owners in the industrial park to determine if any of their stored chemicals will be affected by the flooding, causing possible contamination downstream.

## Unit 4. Incident/Event Assessment and Incident Objectives

### Map:



### Activities:

- The County Emergency Management Office has activated the Emergency Operations Center (EOC).
- The Incident Command Post (ICP), located at Fire Station #1 at Avenue F and 6th Street, requested an All-Hazard Incident Management Team (IMT) from the State.
- The Staging Area was established at Avenue I and 12th Street.
- The EOC has contacted the school bus service for buses and requested that the American Red Cross open a shelter for evacuees.
- The Department of Public Works has begun sandbagging and continues to monitor river levels.
- The EOC Manager has briefed the mayor and police chief. The police chief is concerned about the location of the ICP. Working with the Incident Commander, it was determined that a full Command Staff and General Staff are required by the next operations period.
- The next operational period will begin at 1800 hours.

**Incident Briefing (ICS 201)**

<b>1. Incident Name:</b> Emerald City Flood	<b>2. Incident Number:</b>	<b>3. Date/Time Initiated:</b> Date: 8-4-20XX      Time: 1200
<b>4. Map/Sketch</b> (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment): <i>Sketch the incident scene. Indicate the location of ICS facilities and other key structures.</i>		
<b>5. Situation Summary and Health and Safety Briefing</b> (for briefings or transfer of command): Recognize potential incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.		
<b>6. Prepared by:</b> Name: IC Ralph Wilkins    Position/Title: _____ Signature: _____		
ICS 201, Page 1	Date/Time: _____	

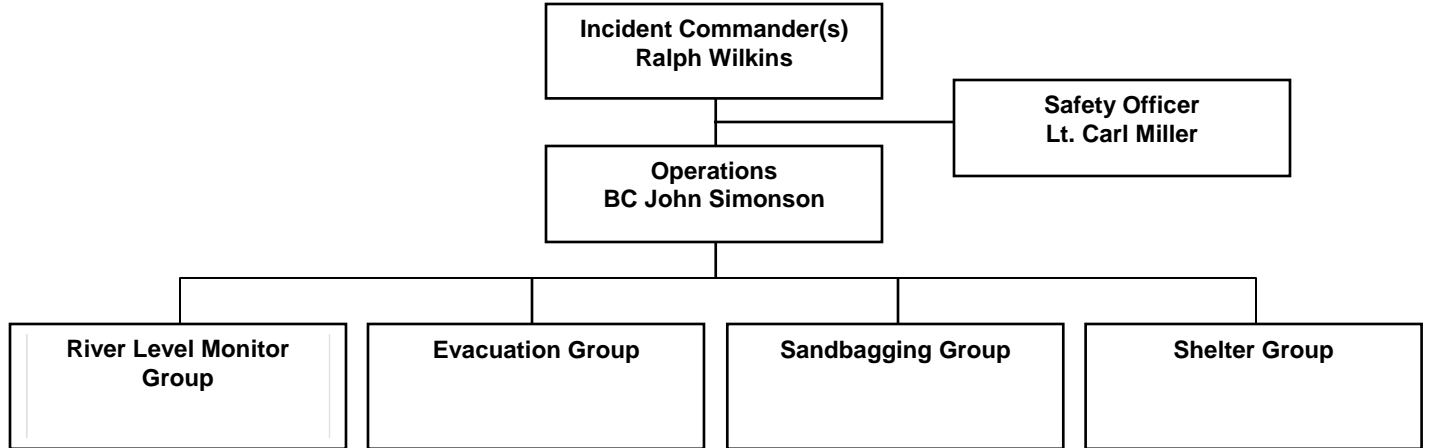




**Incident Briefing (ICS 201)**

<b>1. Incident Name:</b> Emerald City Flood	<b>2. Incident Number:</b>	<b>3. Date/Time Initiated:</b> Date: 8-4-20XX      Time: 1200
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**9. Current Organization** (fill in additional organization as appropriate):



<b>6. Prepared by:</b> Name: IC Ralph Wilkins    Position/Title: _____    Signature: _____
<b>ICS 201, Page 3</b> Date/Time: _____

**Incident Briefing (ICS 201)**

<b>1. Incident Name:</b> Emerald City Flood		<b>2. Incident Number:</b>		<b>3. Date/Time Initiated:</b> Date: 8-4-20XX      Time: 1200	
<b>10. Resource Summary:</b>					
Resource	Resource Identifier	Date/Time Ordered	ETA	Arrived	Notes (location/assignment/status)
Police/marked vehicles (8)	EC-10, EC-12, EC-22, EC-2, EC-3, EC-4, EC-5, EC-6			X	Routine Patrol
HazMat Team	CC/LC HazMat 1			X	Staging
School Buses (10)			1500	<input type="checkbox"/>	
Engines (3)	ECFR Engines 3, 2, & 4			X	Evacuation Group
Trucks (2)	ECFR Truck 10 & 11			X	Evacuation Group
Front Loaders (2)				X	Sandbagging Group
Pickup trucks (4)				X	River Level Monitoring Group
Dump trucks (4)				X	Sandbagging Group
				<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
<b>6. Prepared by:</b> Name: IC Ralph Wilkins    Position/Title: _____    Signature: _____					
<b>ICS 201, Page 4</b>			Date/Time: _____		

**Assignments**

<b>Assigned Position</b>	<b>Issues Identified</b>
<b>Incident Commander</b>	
<b>Safety Officer</b>	
<b>Public Information Officer</b>	
<b>Liaison Officer (if assigned)</b>	
<b>Operations Section Chief</b>	
<b>Planning Section Chief</b>	
<b>Logistics Section Chief</b>	
<b>Finance/Administration Section Chief</b>	

### STUDENT HANDOUT – UNIT 5: EMERALD CITY FLOOD SCENARIO – PART 1

#### Purpose:

The purpose of this activity is to select tactics for the next operational period and complete a Safety Analysis form.

#### Instructions:

Work in teams to complete the following activity:

1. Review the following information in your handouts:
  - Scenario Update
  - Incident Maps
  - Resources
2. Complete the ICS Form 215 for Evacuation Division using the available information. Be sure to locate the Incident Briefing, ICS Form 201, developed in the previous unit.
3. Based on the tactics selected in the ICS Form 215, complete the Safety Analysis (ICS Form 215A).
4. When you complete the worksheets, let the instructors know. The instructors will review the forms and provide feedback. After receiving feedback, proceed to the next part of the activity.
5. You have 1 hour for this activity.

### Scenario Update:

The National Weather Service reports indicate continued rain for the Emerald City area and areas north of the city. The Rapid River is predicted to crest at 12 feet above flood level around 2100 hours this evening.

Public Works crews monitoring the flood levels report increased debris piling up on the 10th Street Bridge, and State highway engineers on the scene are recommending closing the bridge to all traffic due to its weakened condition. The Evacuation Group is reporting that homeowners north of 10th Street are beginning to move their families out of the area. The American Red Cross has opened two shelters, one at the Lawrence Senior High School and one at the Lafayette Middle School.

The Lake Emerald Nursing Home is attempting to move 55 patients from their skilled nursing care facility and is asking for assistance from Emerald City Emergency Medical Services, the Fire Department, and the Emerald City School Bus Company. Acme Chemical, located on Avenue G at 16th Street, is reporting first-floor flooding of their chemical processing plant. They are not reporting any chemical release but are closely monitoring their facility.

Resources are beginning to arrive at the Staging Area in the parking lot behind City Hall at Avenue L and 11th Street.

Several media trucks have arrived in the area to film the incident and ongoing operations. While the media are being staged at City Hall, the Staging Area Manager reports that press personnel are beginning to congregate in the Staging Area to film the resources located there.

Calls are coming from concerned citizens wondering about the safety of the municipal drinking water.

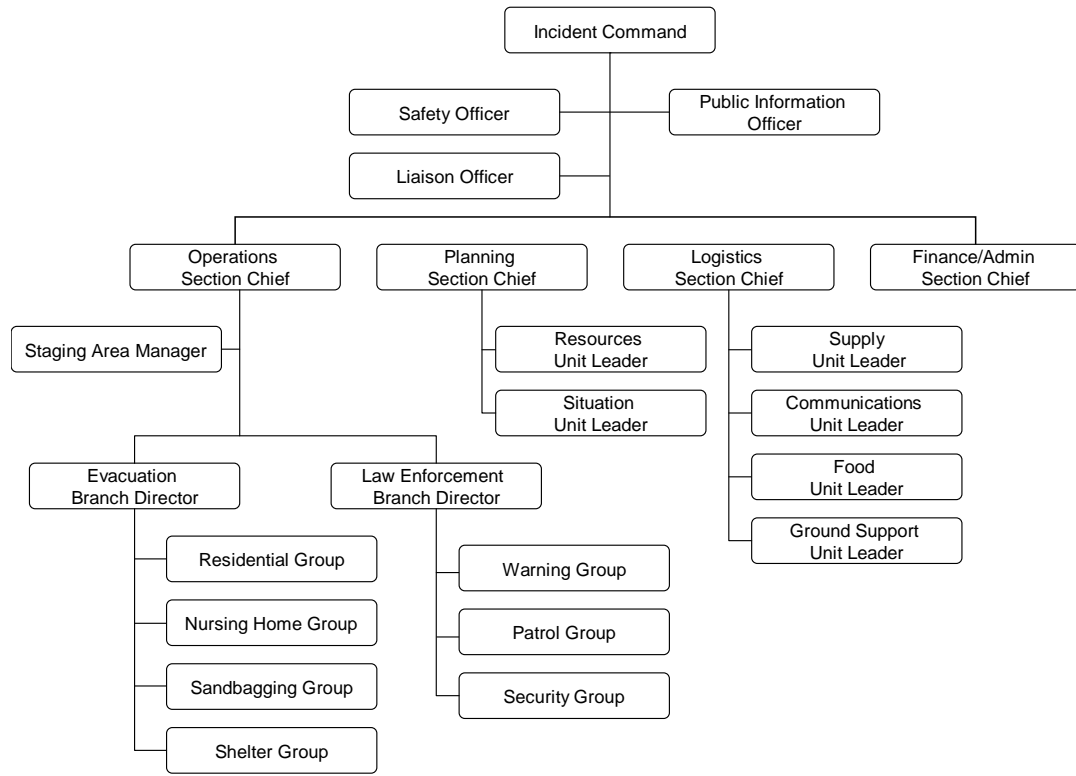
After receiving the report from the National Weather Service, Command determines that additional resources are needed for evacuation, sheltering, sandbagging, water level and chemical monitoring, traffic control, and scene security. Also, several media helicopters arrive in the area to film the incident and ongoing operations. Command has determined that the operational period will be 12 hours.

The next operational period will begin at 1800 tonight and end at 0600 August 5.

### Critical Issues:

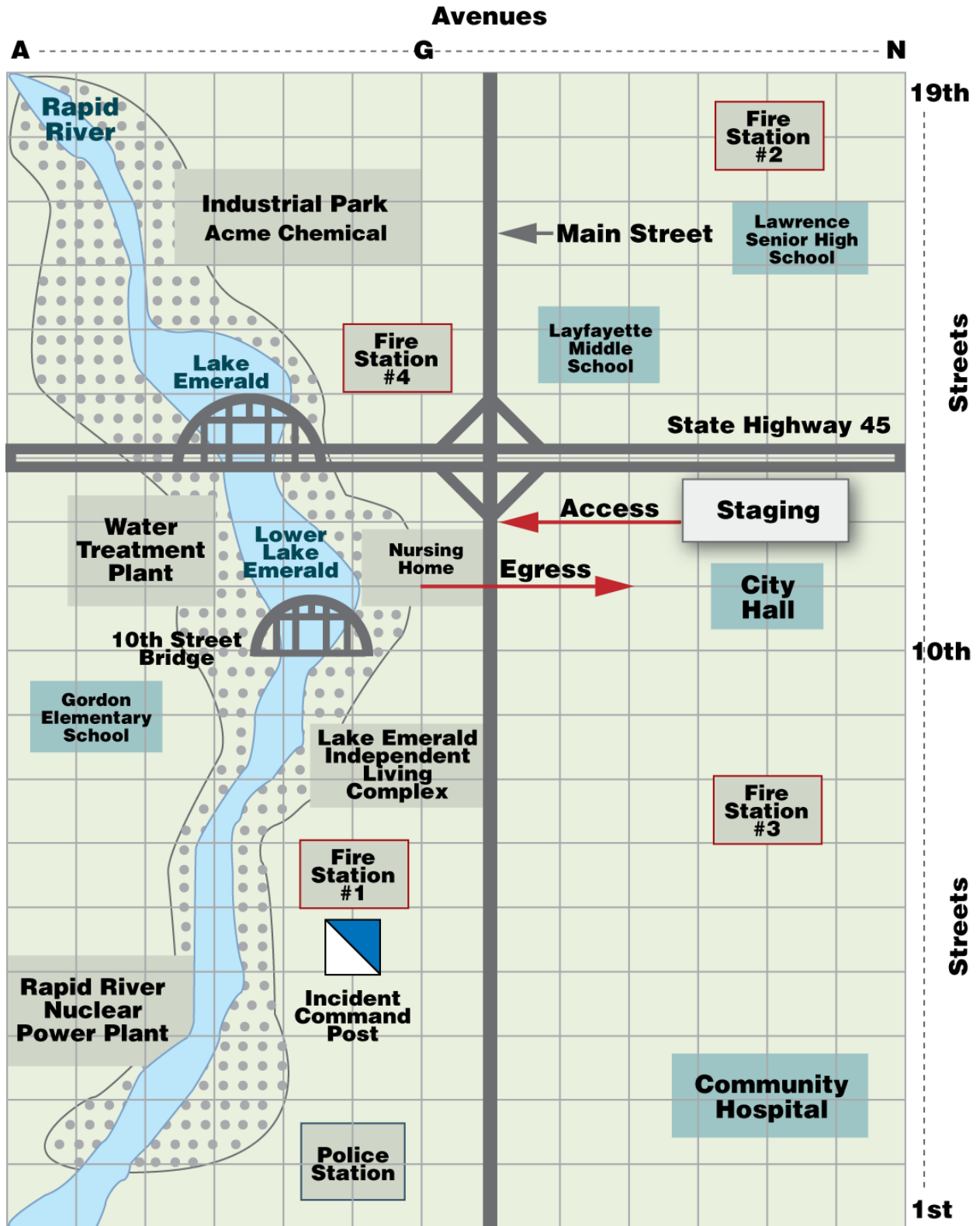
- Implement required safety measures to protect responding personnel and the public.
- Take measures to ensure the evacuation of all households in the projected flood area before the beginning of the next operational period.
- Implement temporary shelter plan to provide housing for all displaced residents prior to flooding.
- Evacuate and relocate nursing home residents before the onset of flooding.
- Monitor water intakes at the water treatment plant for chemical contamination until notified to cease operations.
- Provide timely and accurate weather and safety information to the public through the Joint Information Center.

**Organizational Structure for the Next Operational Period:**



**Unit 5. Planning Process**

**Incident Map:**





## Unit 5. Planning Process

### Strategies/Tactics:

The nursing home has an emergency plan that calls for relocating patients to the Community Hospital. This plan utilizes the Emerald City Emergency Medical Services, the Fire Department, and the School Bus Company to transport patients from the nursing home to the hospital. The American Red Cross, in collaboration with the Salvation Army, will manage the shelters and providing food for displaced residents.

The Public Works Department, along with the Health Department, will monitor the water intake at the Water Treatment Plant for signs of chemical contamination. Additional crews will monitor water levels at strategic points in the flood area, including but not limited to Gordon Elementary School, the Rapid River Nuclear Power Plant, Fire Station #1, and the Police Station. The city engineer, along with representatives from the State Highway Department, will monitor the structural integrity of the 10th Street Bridge. Public Works crews will place sandbags to protect the water treatment plant. Individual homeowners will be able to get free sandbags and sand from the Public Works Department by calling the Public Works Department's 24-hour number.

### Resources Ordered After Initial Assessment:

6. Resources Summary				
Resources Ordered	Resource Identification	ETA	On Scene	Location/Assignment
Police/marked vehicles (8)	EC-10, EC-12, EC-22, EC-2, EC-3, EC-4, EC-5, EC-6		X	Routine patrol
Mutual Aid Police Units (10)		2000		
HazMat Team	CC/LC Hazmat 1		X	Staging
State HazMat Team		2300		
State All-Hazards Incident Management Team (Type 3)		0600		
School Buses (10)		1500		
Engines (3)	ECFR Engines 3, 2, & 4		X	Residential Division
Trucks (2)	ECFR Truck 10 & 11		X	Nursing Home Division
Front Loaders (2)			X	Sandbagging Group, City gravel pit
Pickup trucks (4)			X	Sandbagging Group, City gravel pit
Dump trucks (4)			X	Sandbagging Group, City gravel pit
Pickup trucks (2)			X	10 <sup>th</sup> Street Bridge Monitoring Team
American Red Cross Canteen		1800		

**Your Notes:**

**STUDENT HANDOUT – UNIT 5: EMERALD CITY FLOOD SCENARIO – PART 2**

**Purpose:**

The purpose of this activity is to complete the planning cycle by developing a written Incident Action Plan (IAP) and conducting an operations briefing for a simulated incident.

**Instructions:**

Work in teams to complete the following activity:

1. Prepare an Incident Action Plan, using (at a minimum) ICS Forms 202, 203, 204(s), 205, and 206.
2. Outline the agenda for the operations briefing.
3. Select a spokesperson to present your IAP as a concise 5- to 10-minute operations briefing. Be prepared to present in 60 minutes.

**Your Notes:**

### STUDENT HANDOUT – UNIT 6: EMERALD CITY FLOOD SCENARIO

#### Purpose:

The purpose of this activity is to gain an understanding of how resources are ordered and to understand the challenges and strategies for managing resources during an incident.

#### Instructions:

Work in teams to complete the following activity:

1. Review the Operational Planning Worksheet (ICS Form 215) and Safety Analysis (ICS Form 215A) completed in the previous unit.
2. Describe how resources will be ordered (single point or multipoint) for this incident, from what sources resources will be acquired, and how long they will need to be deployed.
3. Identify the top challenges and strategies for managing resources during this incident.
4. Describe the method for evaluating resource effectiveness.
5. Select a spokesperson and be prepared to present your work in 30 minutes.

**Your Notes:**

**STUDENT HANDOUT – UNIT 7: EMERALD CITY FLOOD SCENARIO**

**Purpose:**

The purpose of this activity is to develop a Demobilization Plan for a simulated incident.

**Instructions:**

Work in teams to complete the following activity:

1. Review the information you developed in the previous activities and the scenario update.
2. Write a Demobilization Plan using the five elements described in Unit 7.
3. Develop a detailed transfer of command briefing to be delivered to the Incident Commander who will supervise the recovery efforts.
4. Be prepared to present the main points of the Demobilization Plan using a transfer of command briefing format/outline.
5. Select a spokesperson and be prepared to present your work in 45 minutes.

### Scenario Update:

- It is now August 7th, at 0700 hours, 2 days after the river has crested. The river levels are steadily receding and residential property owners are anxious and attempting to return to their properties in the area north of the 10th Street Bridge.
- City officials have asked the City Building Inspection Department to inspect evacuated homes for safety and structural integrity before allowing residents to move back in.
- Crews from the Emerald City Gas & Light Company are assisting City Building Inspection crews.
- The 10th Street Bridge remains closed to traffic pending a complete inspection by State highway engineers. The State Highway Department is doing a thorough inspection of the 10th Street Bridge. Drinking water qualities are being monitored and cleanup and damage assessment activities are beginning.
- The American Red Cross and Salvation Army report very few evacuees remain in their shelters and will be closing their shelters on August 8th. They will continue to provide meals for disaster workers and displaced residents.
- Representatives from State Emergency Management are beginning the damage assessment process to determine whether there is a need to request a Presidential disaster declaration for Emerald City.
- Emerald City Health Department personnel, along with representatives from the County and the State Health Departments, are monitoring the water intakes and the city drinking water for any signs of contamination. Nothing significant has been noted so far. The County Health Department is also monitoring private wells in the area north of the city as requested by the landowners.
- The Lake Emerald Nursing Home reports that water has receded from their building and they are beginning cleanup procedures. They expect to finish their cleanup, including mandatory inspections by the State Health Department, within a week to 10 days.
- Because the activities are shifting from response to recovery, the mayor of Emerald City has asked the IC to prepare to demobilize and transfer command of the incident to a Unified Command consisting of Emergency Management, the Emerald City Health Department, and the Emerald City Department of Public Works.
- The newly formed Unified Command will focus on restoring essential services, providing a safe re-entry for displaced residents, and completing a thorough damage assessment.
- The transfer of command will take place at 1800 hours on August 7th.

### New Incident Objectives:

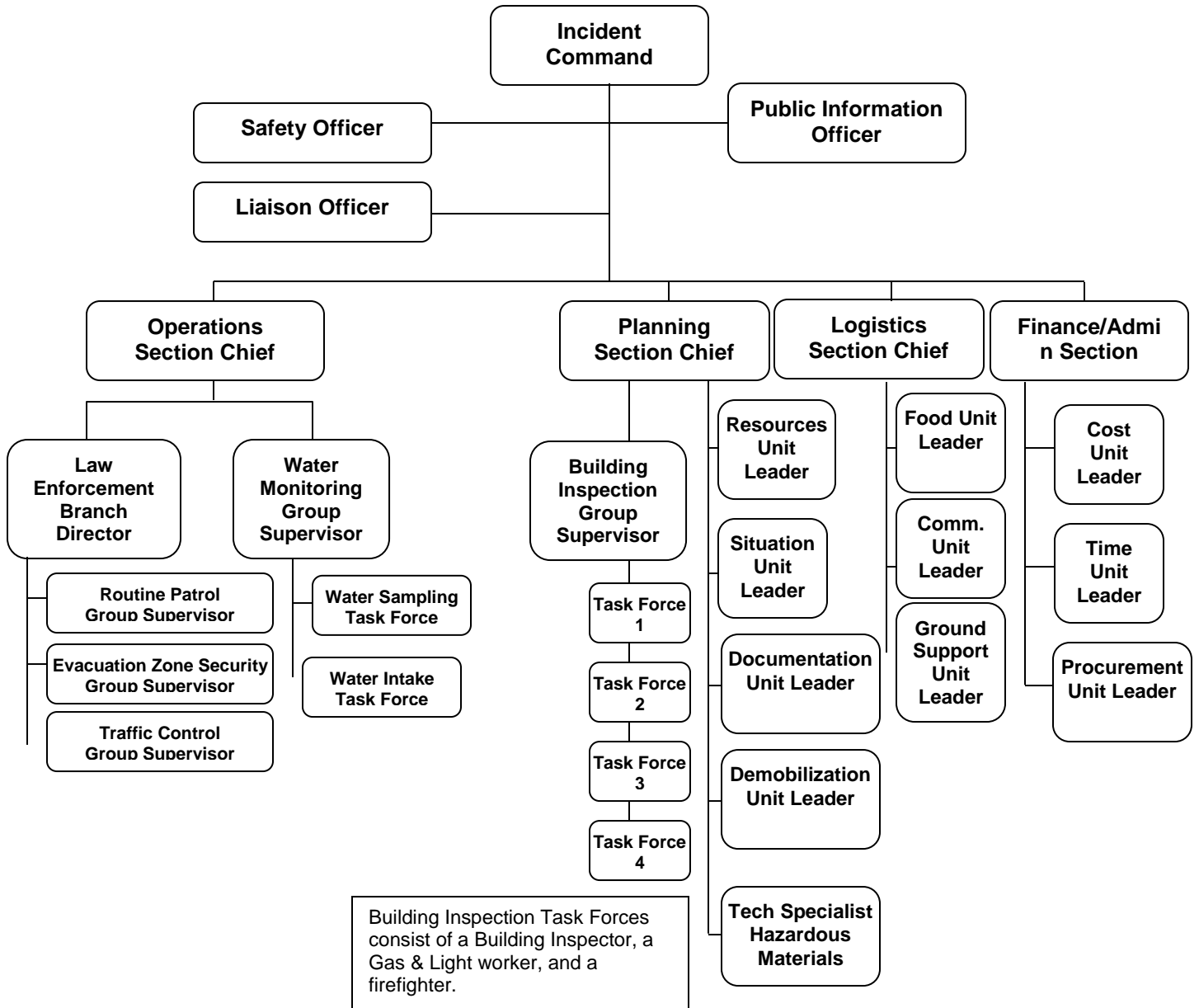
Incident Command determined that the incident priorities will now be restructured to focus on restoration of services, re-entry, and recovery rather than response. The incident objectives include:

- Publish information regarding hazards and how to avoid them for the returning evacuees by 0700 on August 8th.
- Conduct water sampling to determine the extent of chemical contamination. The target completion for all samples is within 48 hours.
- Begin conducting inspections by 0700 on August 8th to ensure the structural integrity and safety of buildings affected by the flood. All inspections must be completed before evacuees are allowed to return home.
- Develop and implement a Demobilization Plan to ensure that surplus personnel and equipment are released in a timely manner.



**Unit 7. Demobilization, Transfer of Command, and Closeout**

**Current Organizational Chart:**



**Your Notes:**