

A Deadly Pond

A Cold Water Rescue Case Study

Panel Members

- Moderator: James Levi, EMS Liaison, Children's Minnesota
- Sergeant Bryan Kruelle, St. Louis Park Police Department
- Officer Aaron Trant, St. Louis Park Police Department
- Captain Paul Rosholt, St. Louis Park Fire Department
- Ross Chavez, Referral Source Liaison at Hennepin County Medical Center
- Lieutenant Tiffani Schweigart, Minnesota State Patrol

What Brought Us Together?

- Incident was widely reported
- Unique challenges presented by the situation
- Multi-jurisdictional response
- Majority of patients were children
- Connection with St. Louis Park Fire Department
- Initial presentation at Children's Minnesota EMS Conference
- Request for Proposal for broader focus of the incident

Just How Big?

Agencies

- St Louis Park 911 Dispatch
- St Louis Park Police Department
- St Louis Park Fire Department
- HCMC EMS
- Golden Valley Police Department
- Minnesota State Patrol
- Hennepin County Sheriff's Department
- Hennepin County Water Patrol
- Hennepin County Crime Lab
- Minneapolis Police Department

HCMC EMS resources committed to the scene response

- 4 dispatchers
- 4 supervisors
- 3 EMS physicians
- 14 paramedics

Format

- Chronological progression
 - Initial response
- Rescue, resuscitation, and transport
- Reconstruction, investigation, and follow-up



Sergeant Bryan Kruelle

Officer Aaron Trant



Captain Paul Rosholt



Ross Chavez



Lieutenant Tiffani Schwiegart

What is ECMO?

- **Extra Corporeal Membrane Oxygenation**
- Rewarms body core efficiently and in a controlled manner while providing full cardiac and respiratory support when they are likely to be very unstable.
- "Gold Standard" treatment
- Lungs often are less than functional once they are warmed.
- Very specialized, very limited resource
 - 4-5 beds at Children's Minnesota
 - 3-4 beds at University of Minnesota Masonic Children's
 - Other ECMO programs located in Rochester and Sioux Falls, South Dakota

Questions?

Hwy 7/100

Cold Water Rescue

The Challenges of a Multi Agency Response

Objectives

- Understand the scene and the unique challenges as well as benefits it offered.
- The importance of resource management and deploying them correctly
- The aftermath. Managing the message, and the importance of responder mental health.

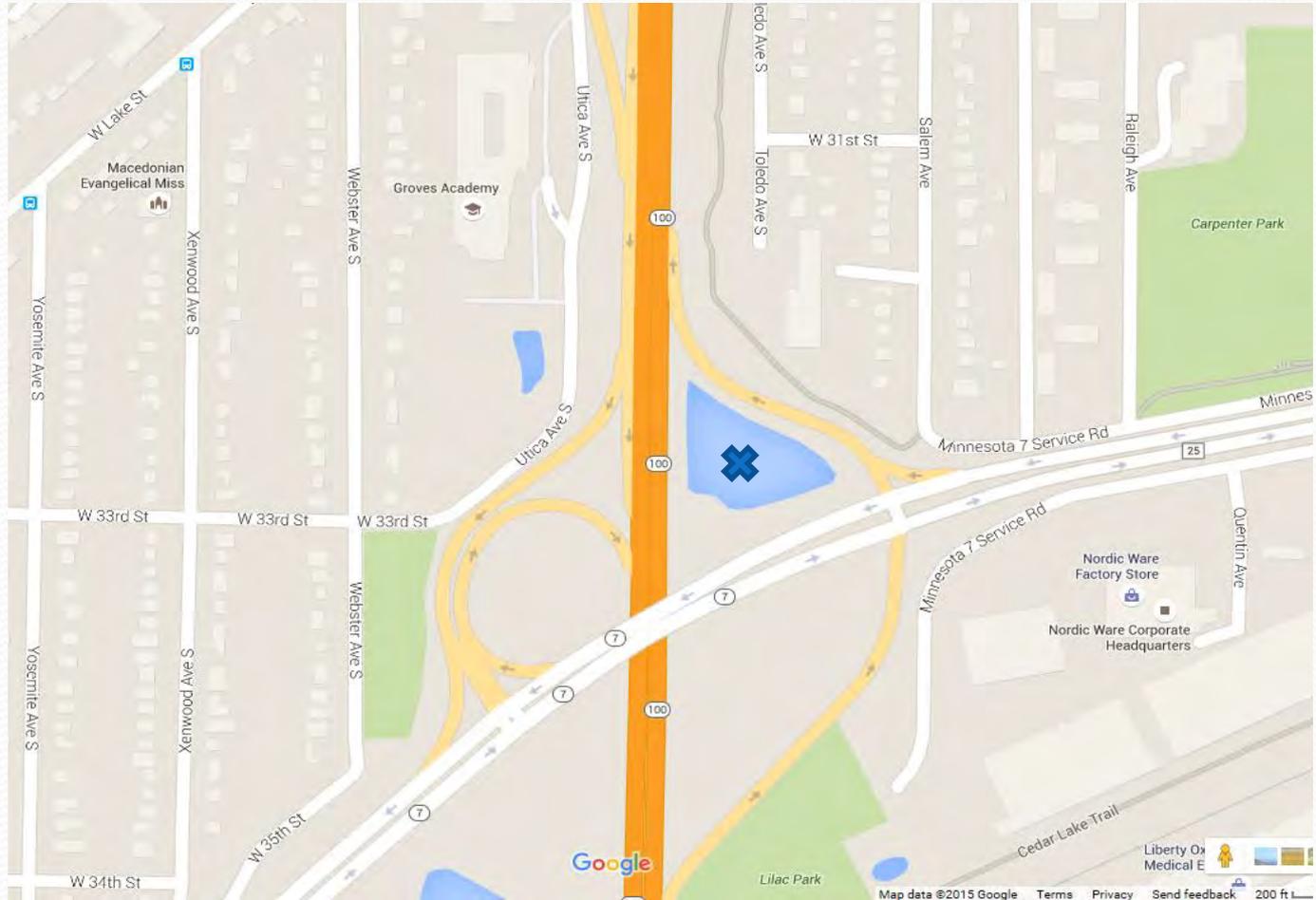
Setting the Stage

- Incident date: November 21, 2013
- Incident time: 0601
- Temperature 37.4 F
- One hour prior to sunrise and rush hour

The Crash

- The Car lost control on the ramp from MN Hwy 7 West to MN Hwy 100 North.
- The car proceeded into the retention pond coming to rest near the center
- Pond Size 225' x 300'
- Water depth in the center was around 10 feet
- Water temperatures were extremely cold and no ice.
- Crash occurred without witnesses

Map







Timeline

- A call was received by St Louis Park 911 Dispatch at approximately 0610. Bystander from a distance made a call when he heard screams for help.
- 0613 SLP PD on scene
- 0615 SLP FD on scene
- 0620 first ALS unit on scene
- 0625 EMS Supervisor on Scene

Following these initial units numerous additional units arrived including Fire, Police, Patrol, Sheriffs, EMS

SLP Police

- 2 Officers initially
- No water rescue equipment
- Made contact with woman and man standing in the middle of the water up to their waist.
- Determined they were standing on the vehicle and that there were still people inside.
- Made attempts to reach vehicle however cold water deterred their effort.
- Performed most of their duties standing in knee deep water

Police Response Gear



Insulated jacket not waterproof

No protection for face and neck

Leather duty boots

Non insulated/not waterproof pants

Water Rescue Suits

Avg. Donning Time 90 seconds

One size fits all design



Encapsulated Rubber Gloves

Waterproof outer shell
with insulated liner

Encapsulated rubber boot





SLP Fire

- Engine 1, Utility 1 and Engine 4-Total personnel 5
- Before the end of the event there would be 23 FD personnel involved in the event.
- Water rescue equipment is on each rig and U1 brought the Zodiac boat, water rope, additional cold water suits and PFD's
- Bulk of the work rested on the shoulders of the initial response crews.
- Physical exertion of swimming in suits

The Rescue

- Suit Challenges
- Setting up rescue lines
- Advancing to the car location and determining orientation.
- Accessing interior of the vehicle in the dark without the use of hands or sight
- Quickly moving patients from water to shore.
- Initiating resuscitation once onshore using EMS and FD/PD staff
- Confusion on number of patients
- Returning for additional patients



Extraction

- Within 12 minutes of the first arriving fire unit the first patient was removed from the vehicle at 0627
- Patient 2 was out at 0629
- Patient 3 was out at 0633

Picked up window punch tool

- Patient 4 was removed at 0636

Returned back to the vehicle for fifth victim

- Patient 5 removed at 0642



Resource Intensive

- As quickly as fire staff arrived on scene they were deployed to waiting ambulance to assist with patient care.
- Each ambulance had two responders and 1 medic in the back.
- Multiple EMS units required early
- As resources were drawn to scene day to day city coverage needed to be dealt with.
- Staff required to pick up multiple staff now at HCMC

Interventions

- Challenges of pediatric patients in a non responsive full arrest state
- Lucas Device
- Getting ambulance staffed so they could leave
- Keeping a traffic plan in place so that more ambulances could get in

Potential Crime Scene

- Priorities
 - First aid/Rescue
 - Jurisdiction
 - Crime Scene
- Evidence Gathering
 - Physical Evidence
 - Interviews
 - Accident Reconstruction
 - 3 Law Enforcement Agencies presenting to:
- Hennepin County/City Attorney Review



Unified Command

- Beginning of the 3rd day on the job
- ICS transfers of command weren't practical until a Chief got on scene
- EMS and Fire were operating separately however in harmony. Day to day relationship aided in that.
- Law enforcement, fire and EMS finally unified at 0702





Reflections

- It is Important to ramp up resources.
- Establish communications plan and patch ASAP
- Stay in your roles and focus on the assignment
- Get unified command established as soon as possible
- Maintain perimeter security
- Maintain a traffic plan for ingress and egress
- Transfer or transition command when appropriate

Media

- If you do not have a PIO find one
- Control the rumor mill
- Protect the victims
- Protect the responders
- Protect the investigation
- Keep information flowing, do not allow media to fill in the blanks with their idea of what happened
- Be available

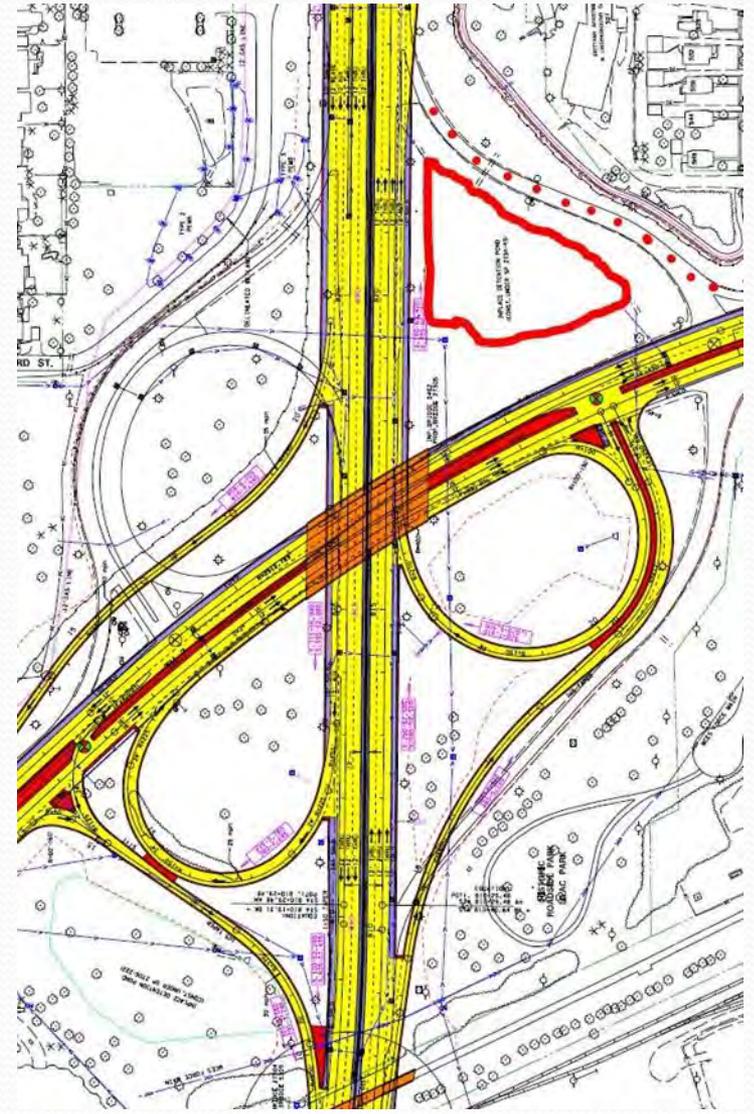
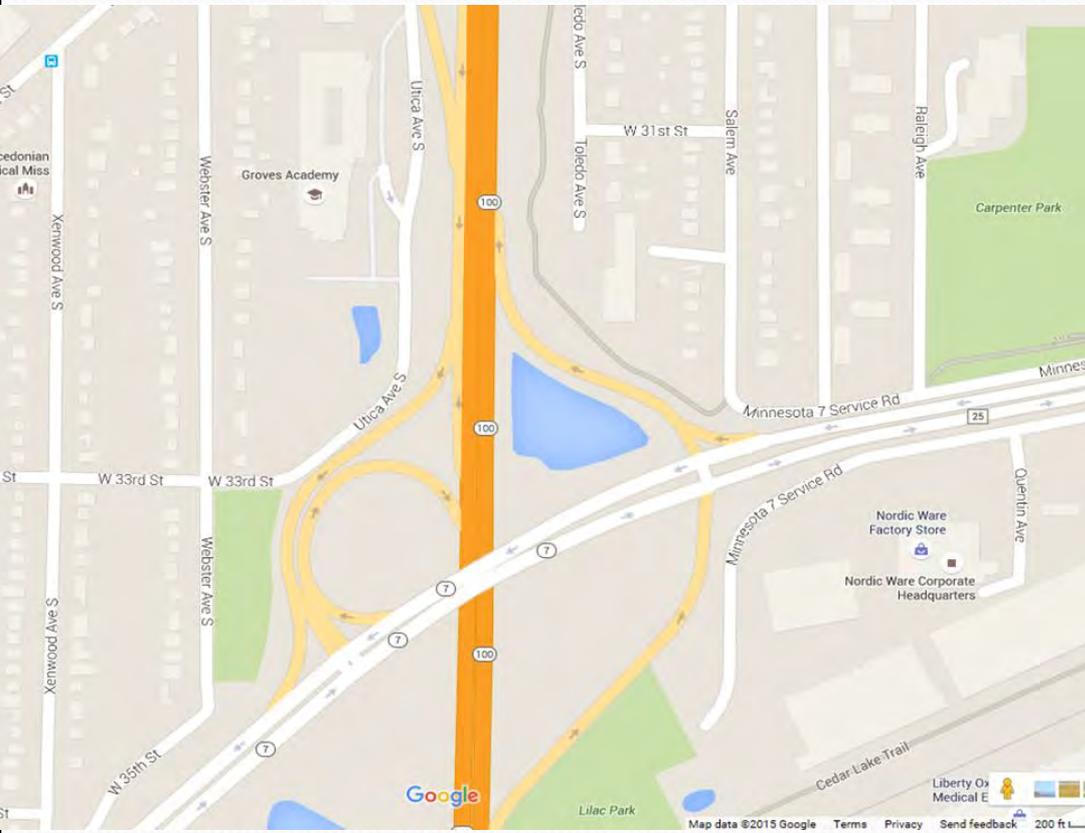


Amani Coleman-Guerrido, 5, left, and Alarious Coleman-Guerrido, 7, right. Alarious died after the crash.

Returning to normal

- Preemptively update crews before messages become public
- Quickly correct inaccuracies
- Initiate PFA (psychological first aid) immediately
- Engage all responders including dispatch
- Set up a CISM event with trained professionals
- Follow up to ensure needs are met (EAP's)
- Prepare for numerous public reiterations of the events and your efforts.





CRIMINAL INVESTIGATION & MEDIA

Summary of the investigative
conclusions & role of the media

What did we have?

- ▣ Potential homicide investigation
 - Were the children all still in the vehicle?
 - Were the children deceased or assaulted prior to entering the water?
 - Was this an intentional act?
 - Besides our driver and children, who were the other key players?
- ▣ Chaotic scene
 - Different information elicited by the mother/driver
 - Investigators were responding for different agencies
 - Coordination of line officers
 - Agency leadership off-site
 - Media arriving at the scene

Jurisdiction

- ▣ Multiple agencies on scene
- ▣ Questions arose as to which agency was lead
- ▣ Established a multi-agency approach
 - Utilize the strengths of each individual agency
 - Work collaboratively towards the same goal
 - Team interview approach
 - Division of duties based upon investigators and agency strengths
 - Meetings during the investigation process.

Crime Scene

- ▣ Initial interview of our driver & witness
 - Line officers to gather preliminary information
- ▣ Formal interviews
 - Team approach (SLPD, MSP, HCSO)
 - Marion Guerrido
 - Julius Rennie
 - Oine
 - First responding fire personnel
- ▣ Fluid testing
 - Consent blood test obtained

Crime Scene

- ▣ HSCO Crime Lab
 - Gathering of all clothing at hospital
 - Took possession of vehicle
 - ▣ Stored indoors at the Sheriff's office
 - ▣ Search warrant obtained for vehicle and Airbag Control Module (ACM)
- ▣ HSCO Dive Team
 - Assisted with secondary search the day of the crash
 - Returned to the pond the following day to search for the cell phone – never located

Crime Scene

- ▣ Crash Reconstruction
 - Forensic road evidence collected
 - Due to damp roadway, floor dryers were brought out to dry the pavement and observe the tire marks
- ▣ Overall, once the scene was no longer in a rescue operation, the process at the scene became slow and methodical





Criminal Investigation Conclusions

- ▣ The weather was calm
- ▣ The road surface was damp
- ▣ There were no roadway defects, construction or maintenance in the area.
- ▣ The area was illuminated by street lamps
- ▣ The vehicle's ACM did not record data as their had not been a deployment
- ▣ The blood results were negative and no impairment had been detected

Criminal Investigation Conclusions

- ▣ The roadway had a slight grade, 2-3% traveling north to south.
- ▣ The grassy area between the roadway and the pond had 15-17% grade.
- ▣ Hennepin County Water Patrol assisted with measuring depth of the water and vehicle position in the water.
- ▣ The came to rest in 7.5-8 feet deep water.
- ▣ There were not enough restraints for all the children and the 1 child seat was not attached to the rear seat

Criminal Investigation Conclusions

- ▣ Speed was determined to be 19-24 mph when the vehicle hit the grass, from the asphalt.
- ▣ There were no medical conditions that affected Guerrido.
- ▣ Attributed to Marion Guerrido losing control of the vehicle due to improper steering input followed by over correction.
- ▣ Dominant factors: driver inexperience and lack of proper driver's training

Criminal charges

- ▣ Submitted to Hennepin County Attorney
 - Declined Criminal Vehicular Homicide, as elements of the statute were not met
- ▣ Submitted to the St. Louis Park City Attorney
 - Formally charged with Instruction Permit violation; Uninsured motor vehicle; Child Passenger restraint violation.
 - Convicted of 2 misdemeanors and 1 petty misdemeanor
 - Supervised probation 1 year
 - 90 days in the Hennepin work house, with 60 days stayed, eligible for electronic home monitoring & work release

Media

- ▣ Initial news conference releasing response, rescue and initial details of information
- ▣ Second news conference for rescuers to explain rescue operation
- ▣ Family Attorney: Took all media inquiries as to the status and condition of the children
- ▣ Daily requests for additional information, much based upon updates on the children