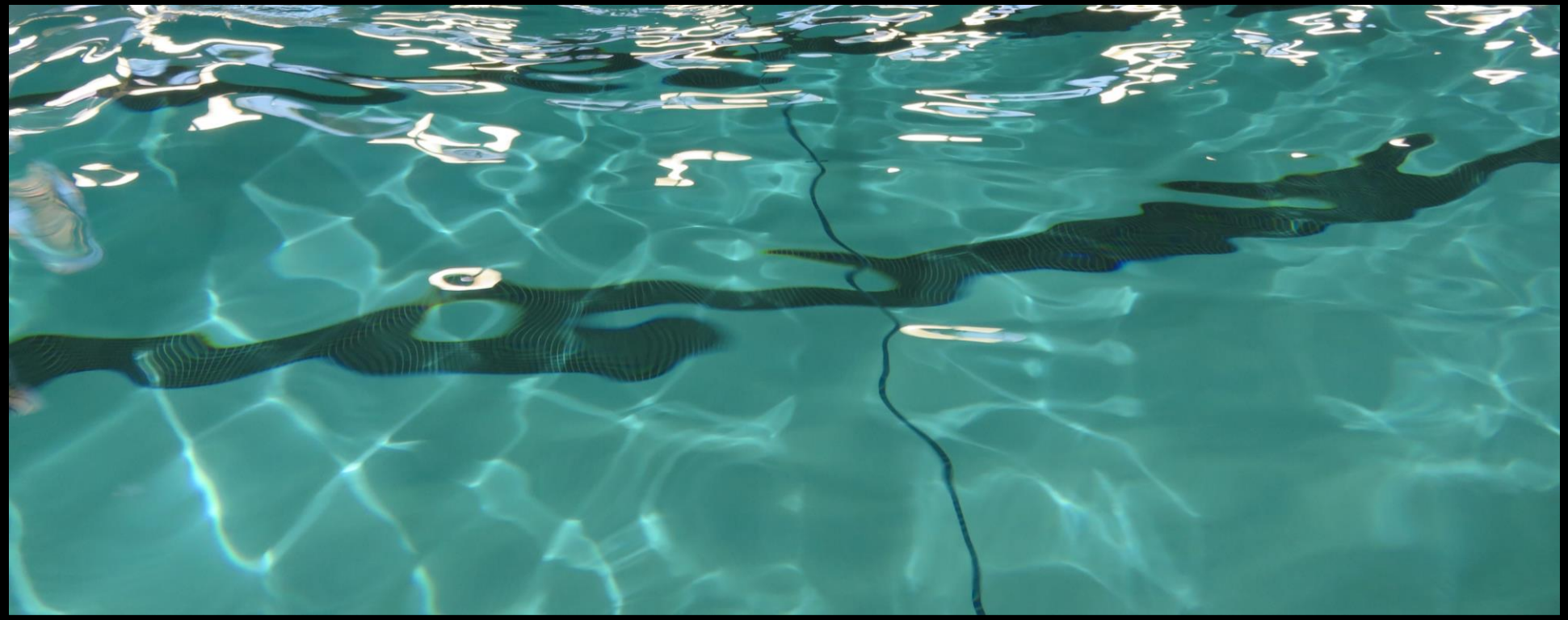
LIFESAVING SOCIETY FALL FORUM 2019



DROWNING DETECTION TECHNOLOGY

IMPACTS, INSIGHTS, & LEARNINGS

PRESENTED BY

ROB CAMPBELL

SUPERVISOR OF AQUATIC STRATEGIES

CITY OF EDMONTON

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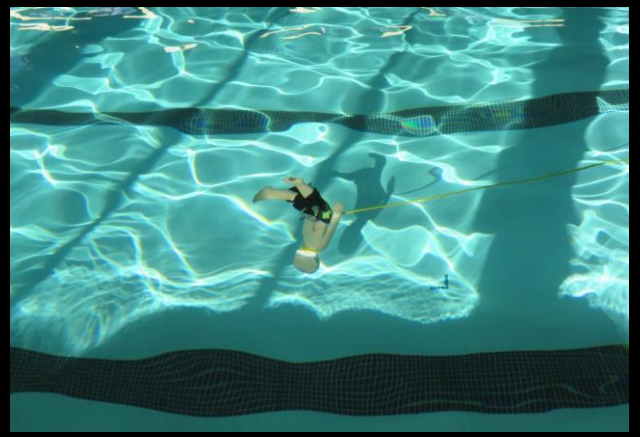
OVERVIEW

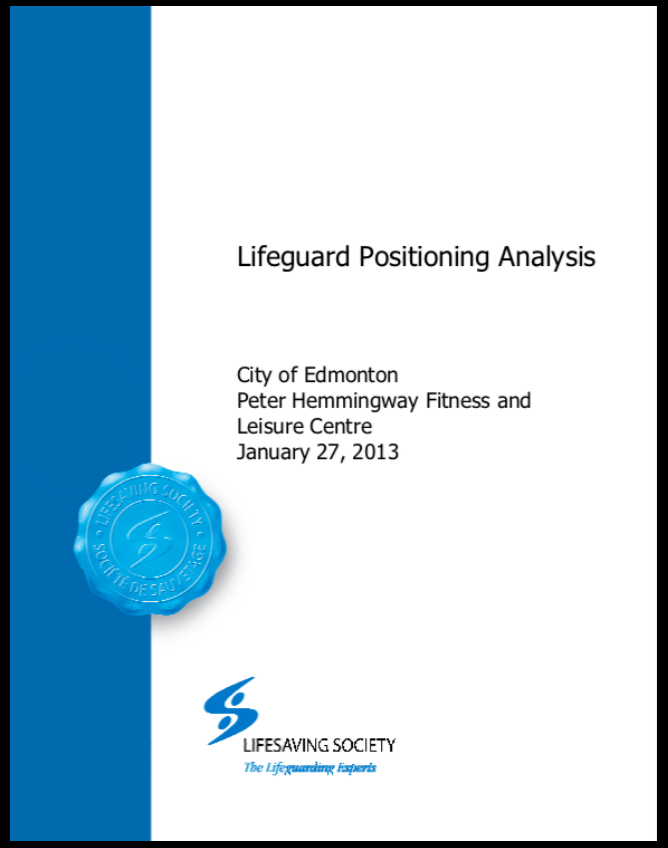
- BACKGROUND
  - Peter Hemingway Fitness and Leisure Centre – 2013 LPA
- DROWNING DETECTION TECHNOLOGY
  - AngelEye
- LIFEGUARD POSITIONING ANALYSIS
  - Findings and Comparisons – 2019 LPA
- OUTCOMES
  - Learnings
  - Challenges
  - What's Next?



BACKGROUND

PETER HEMINGWAY FITNESS AND LEISURE CENTRE

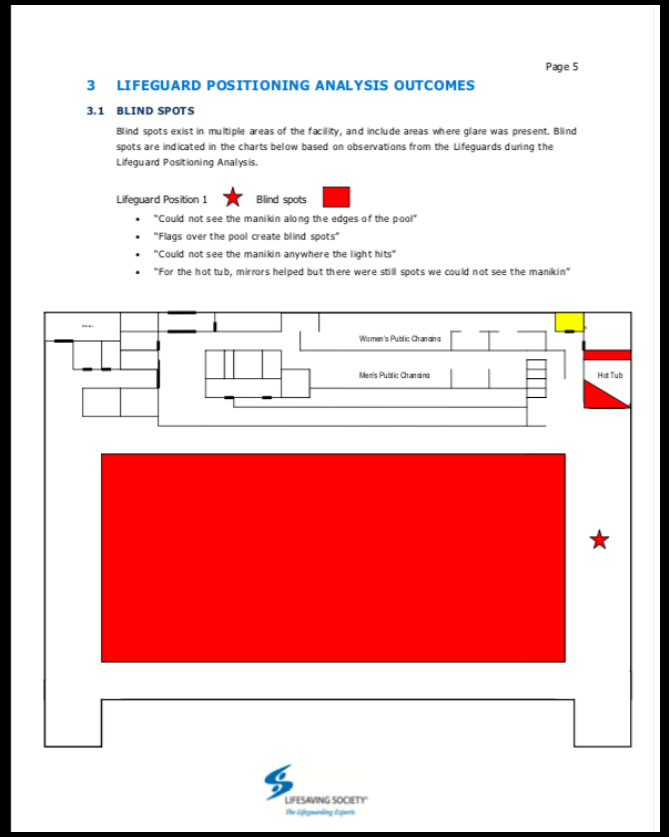
2013 LPA



GLARE

BLINDSPOTS

LG Position 1



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3 LIFEGUARD POSITIONING ANALYSIS OUTCOMES

3.1 BLIND SPOTS

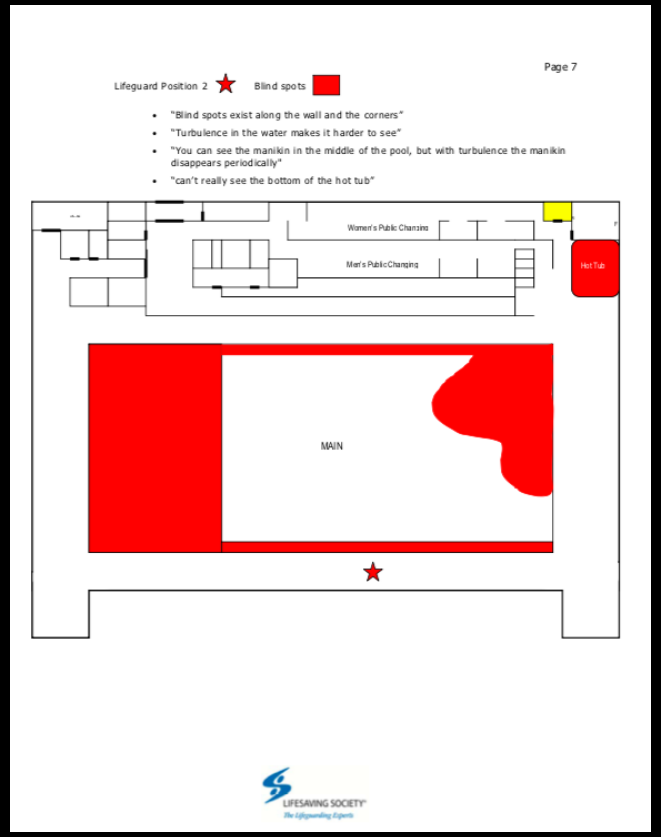
Blind spots exist in multiple areas of the facility, and include areas where glare was present. Blind spots are indicated in the charts below based on observations from the Lifeguards during the Lifeguard Positioning Analysis.

Lifeguard Position 1 ★ Blind spots

- "Could not see the manikin along the edges of the pool"
- "Flags over the pool create blind spots"
- "Could not see the manikin anywhere the light hits"
- "For the hot tub, mirrors helped but there were still spots we could not see the manikin"

LIFESAVING SOCIETY

LG Position 2



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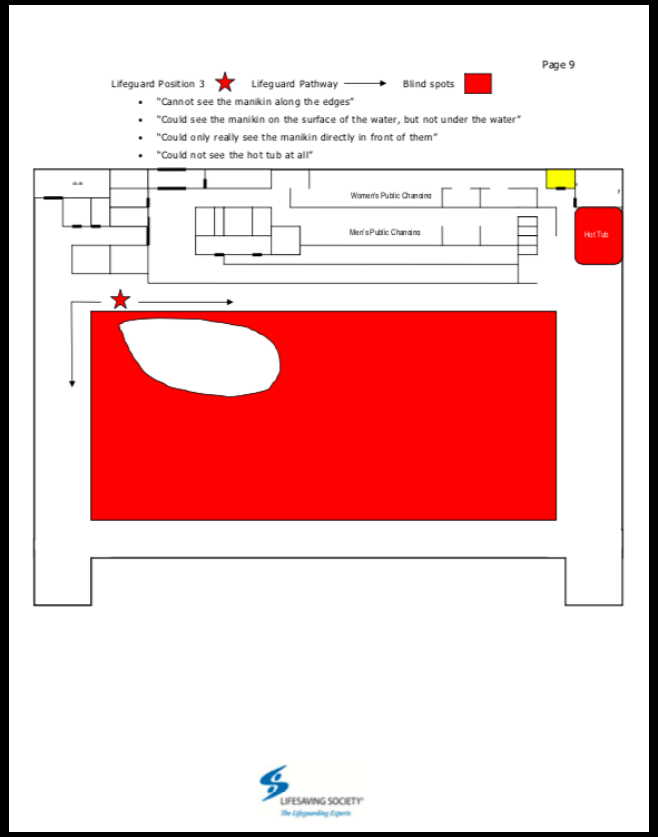
Lifeguard Position 2 ★ Blind spots

- "Blind spots exist along the wall and the corners"
- "Turbulence in the water makes it harder to see"
- "You can see the manikin in the middle of the pool, but with turbulence the manikin disappears periodically"
- "can't really see the bottom of the hot tub"

LIFESAVING SOCIETY

LG Position 3



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Lifeguard Position 3 ★ Lifeguard Pathway ⟶ Blind spots

- "Cannot see the manikin along the edges"
- "Could see the manikin on the surface of the water, but not under the water"
- "Could only really see the manikin directly in front of them"
- "Could not see the hot tub at all"

LIFESAVING SOCIETY

FOLLOW UP ACTIONS

- LIFEGUARD SUPERVISION REQUIREMENTS
- EXTERIOR WINDOW COVERINGS
- UNDERWATER SURVEILLANCE TECHNOLOGY

ANGELEYE

AngelEye

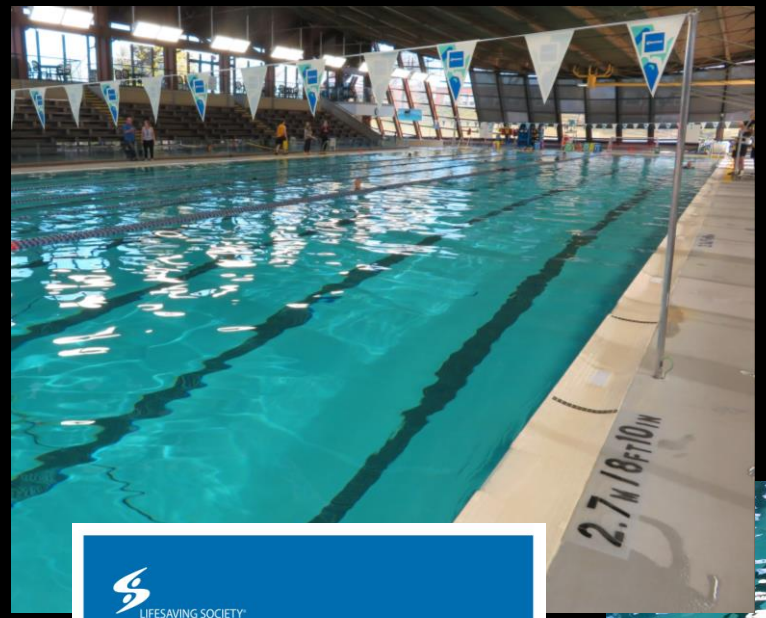
The Swimming Pool LifeGuard

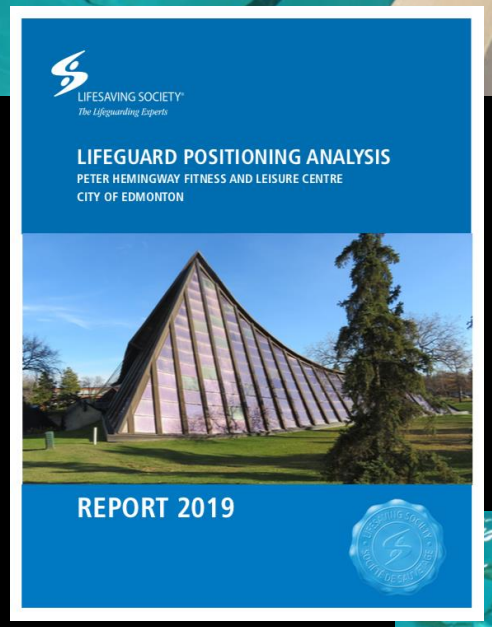
STATE OF THE ART DROWNING DETECTION

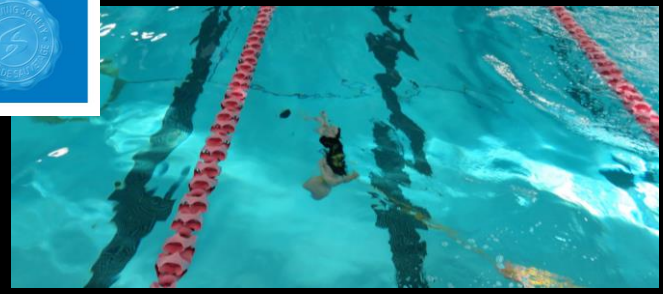
VIDEO

2019 - LPA

PETER HEMINGWAY FITNESS AND LEISURE CENTRE







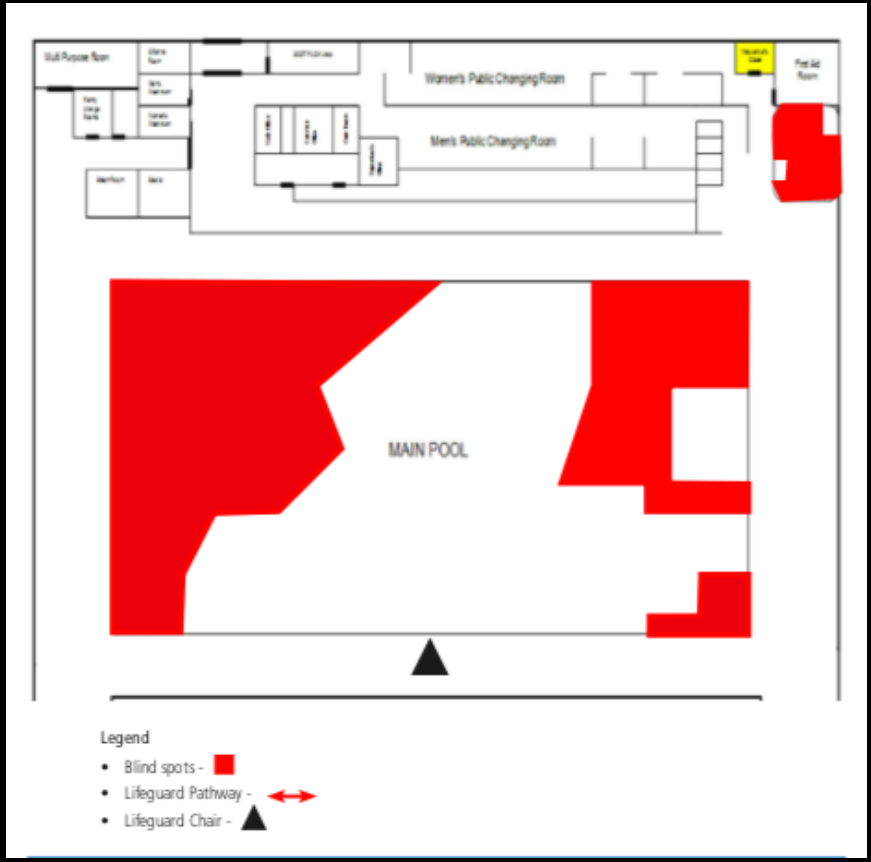
GLARE

Blinds Up

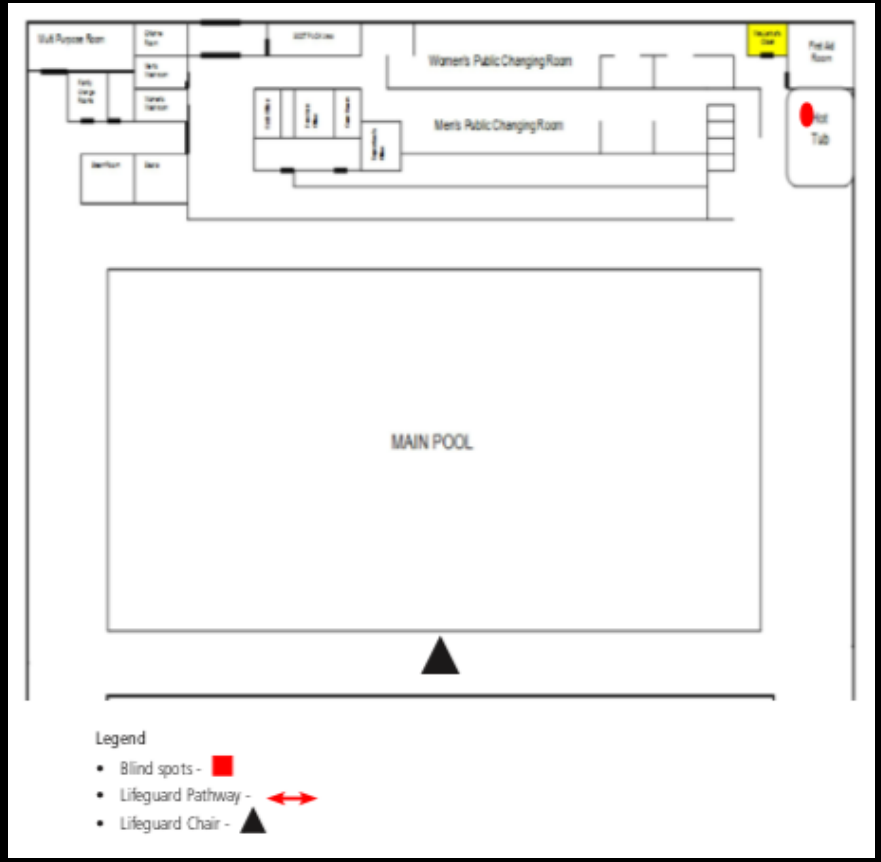
Blinds Down

BLINDSPOTS

LG Position 1: Lifeguard Chair – Without System



LG Position 1: Lifeguard Chair – With System



COMMENTS FROM LG's

- "It was interesting to see how close the manikin could be and still not be recognizable"
- "I thought it was interesting that with the cameras there was still a blind spot in the hot tub"
- "I find that the two lifeguard system is pretty effective, with the cameras I can see most things so as the roving lifeguard I feel safer"
- " I noticed how bad the glare can really be because we had the manikin as a visual reference"
- "Glare was more of a concept before, but now I realize how much it affects my ability to lifeguard"

WHAT'S NEXT?

- LEARNINGS & OUTCOMES
- CHALLENGES
- OPPORTUNITIES

Q & A

QUESTIONS & DISCUSSION

CLOSING

ACKNOWLEDGEMENTS

THANK YOU