



ASPNSP™
**Association for Swimming Ponds
and Natural Swimming Pools**

Public NSPs in the United States.

The process for gaining acceptance.





Natural Swimming Pool Obstacles

- Awareness.
 - NSPs represent ~16% of all swimming pools in Europe
 - 3.8M swimming pools
 - NSPs represent <.02% of all swimming pools in the US.
 - 10.4M swimming pools
 - 309,000 Public swimming pools
- Knowledgeable Professionals.
 - Designers, Contractors, Builders are entrenched in the “Status Quo”
 - Business models evolved with the promotion of “Chemical treatment”
 - Chemical sales represent and profitable revenue stream.
- Consumer confidence.
 - Misunderstanding of what an NSP is
 - Mixed messages and misinformation on NSP design and operation.
 - Lack of Public NSP access



Natural Swimming Pool Opportunités

- Rising interest in Environmentally Sustainability
 - Address the needs of “Green lifestyles”
 - NOT considering a chemical pool.
 - Sustainable Businesses and communities .
 - Eco Tourism
 - Glamping
 - Public parks
- Gain recognition of NSPs and Biological filter methods
 - Based on Science and data.
 - Water treatment objective (natural or chemical) = suppress the growth of pathogens
 - Promote NSPs as a “Nature-Based Solution”
 - DANA and the IOB
 - Residential and Public aquatic venues.
 - New builds and conversions



The Model Aquatic Health Code (MAHC)

The guidelines for Public Aquatic venues in the US

- Developed through collaboration on best practices in design and operational criteria.
- Technical Support Committees and Technical Review Committees comprised of designers, builders, facility managers, local health officials, Centers for Disease Control (CDC), pool industry operators, and service companies.
- Seven categories of guidelines:
 1. Design and construction
 2. Disinfection and water quality
 3. Lifeguarding and Bather supervision
 4. Injury prevention, Risk management, & Safety
 5. Operation and Maintenance
 6. Recirculation and filtration
 7. Ventilation and air quality



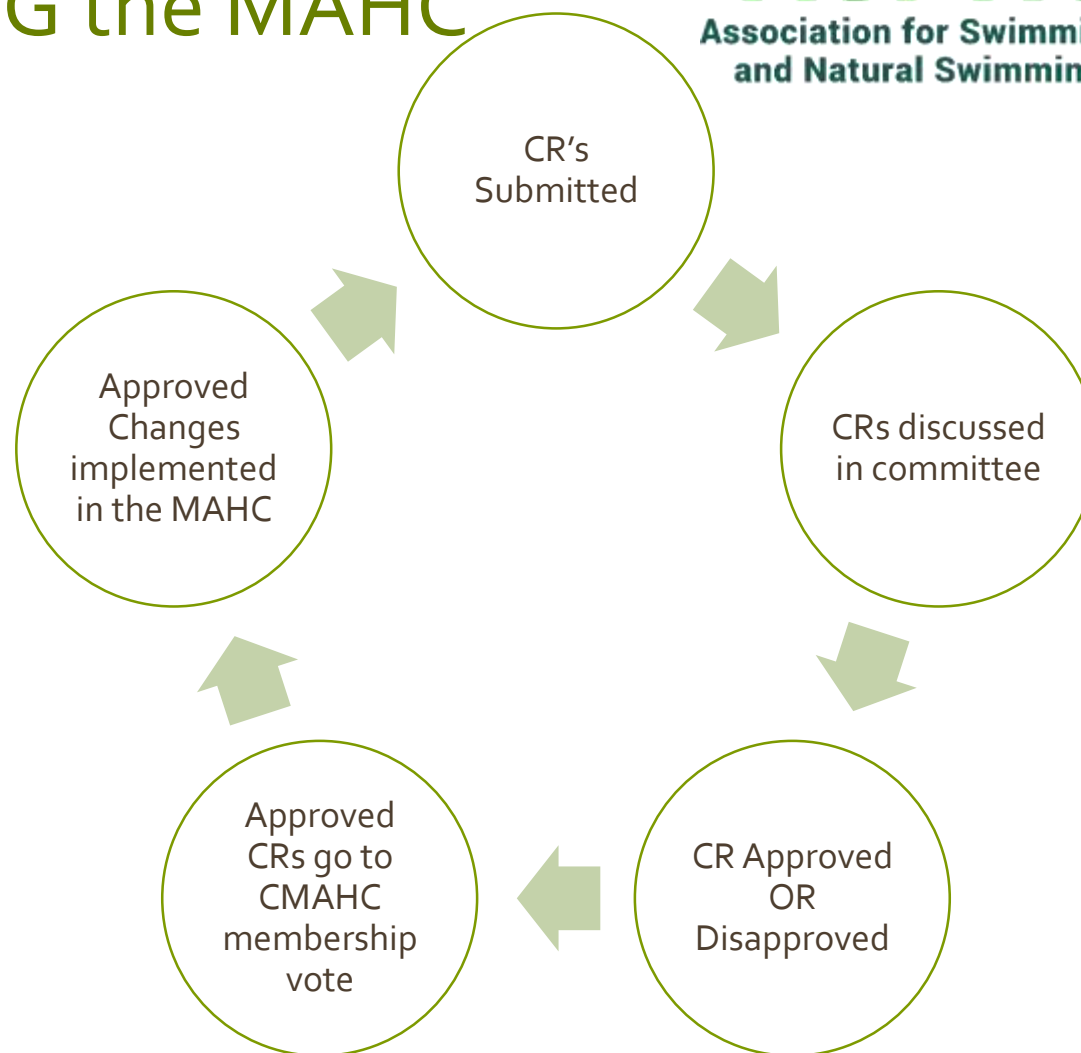
US Public Aquatic venues and the MAHC

- Model Aquatic Health Code (MAHC) –
 - Voluntary guidance to make swimming and other water activities healthier and safer.
 - For local and state agencies needing to **update** or **implement swimming pool and spa code**, rules, regulations, guidance, law, or standards governing the design, construction, operation, and maintenance of public swimming pools, spas, hot tubs, and other disinfected aquatic facilities.
- The Council for the Model Aquatic Health Code (CMAHC)
 - A non-profit organization that promotes the health and safety of people, families, and workers at public swimming facilities.
 - Created to **partner with the Centers for Disease Control and Prevention (CDC)** to manage updates to, and promote voluntary adoption of, CDC's Model Aquatic Health Code (MAHC), the only all-inclusive national model pool code.
 - No other organization exists exclusively to advocate, evolve, innovate, promote implementation, organize research in support of, and advise CDC on needed updates to the MAHC.
 - The MAHC is kept sustainable, current, and complete because the people who use it also develop, discuss, and vote on proposed changes through membership in the CMAHC.



The process for CHANGING the MAHC

- Change Request (CR) submitted
- CRs discussed within “review” committees
- CR Approved or Disapproved
- Approved CR’s voted on by the CMAHC members.
- Additions to MAHC implemented
- Every three years CRs are submitted and a new version of the MAHC is created
- This past year over 530 separate Change Requests were submitted for consideration.





Where we are in the process....

This is a marathon, not a sprint.



Driven by your expertise.

THIRD EDITION MODEL AQUATIC HEALTH CODE
2020 Change Request Form
(CR #: 4.7-0001 - In Review)



Name:	Allen	Schnaak
Date:	2020-02-01	
Organization:	Association for Swimming Ponds and Natural Swimming Pools (ASPNSP.org)	
Submitted on Behalf of:	BioNova Natural Pools	
Address:		
City:	Chester	
Country:	United States	
State or Province:	New Jersey	
Zip or Mail Code:	07930	
Phone:	7703355904	
Extension:		
Email:	allenschnaak@gmail.com	

<p>6) Explain the Purpose of, the Necessity for, and the Benefits Derived from the Proposed Change <i>(e.g., cost reduction, public health impact, new technology, etc.)</i></p>
<p>Allows for the adoption of natural water purification processes for use in public swimming environments as currently supported in Europe through FLL and IOB.</p> <p>Natural Swimming Pools (NSPs) represent a growing segment of pool operation, bolstered by the increasing desire of environmentally motivated clients (bathers, pool managers, and builders) who are seeking sustainable options to support environmentally sustainable lifestyle choices. Currently over 6% of US households subscribe to a "Green Living" lifestyle. Motivated by environmental stewardship these persons are choosing green roofs, gray water capture and treatment, man-made wetlands for wastewater treatment, alternative energy sources to power their homes and vehicles, to name a few, and are seeking swimming environments that are treated through natural processes that support this lifestyle.</p> <p>The interest in NSPs is gaining popularity in the US, with request for public NSPs in "Green Living" communities, Health and Wellness day spas, Glamping locations, and public parks. Webber Park, in Minneapolis, MN became the first to install a public NSP in the US (2016), and additional municipalities are seeking guidance for the proper design, operation, and maintenance of public NSPs.</p> <p>The application of Limnological sciences provide the basis for the successful adaptation of naturally purified water, and is successfully employed in hundreds of public NSPs in Germany, Austria, and throughout Europe. Supported by WHO and governed through the FLL, the IOB has provided the global standard for designing, operating, and maintaining public natural pools in Europe.</p>

Thank you to those that have provided your international support and expertise



8) Substantiate Request with Data and Supporting Information

Provide substantiation to support proposed change. Use "Attach Documents" button below to submit supporting information. Changes must be supported by technical information, published scientific studies, other references, or editorial in nature. Below, please cite references by name of first author and article title. (e.g., Author, Title.)

Stefan Bruns (corresponding author) Christina Pepler - **Hygienic quality of public natural swimming pools (NSP)** - † This work describes the in-situ (water treatment inside the pool) and ex-situ water treatment (water treatment via external water treatment plants) of NSP, and the influence of zooplankton in existing NSP on the elimination rate of Cryptosporidium and Giardia.

From the IOB/FLL PUBLICATION OF POLICY COMMITTEE "Public Swimming and Bathing Ponds" assisted by the committee "Swimming and Bathing Ponds" - **Recommendations for Planning, Construction, Servicing and Operation of Outdoor Swimming Pools with Biological Water Purification (Swimming and Bathing Ponds)**

From IOB INTERNATIONAL ORGANIZATION FOR NATURAL BATHING WATERS - **DANA - Database for Natural Swimming Pools** - Provides an overview of the purpose and process for obtaining public NSP data as oversight and research on the efficacy of NSPs operated in a public environment.

From IOB INTERNATIONAL ORGANIZATION FOR NATURAL BATHING WATERS e. V. - **NATURALLY CLEAN WATER THROUGH BIOLOGICAL WATER PURIFICATION** - this brochure provides a brief overview of the technological basis for biological purification and the expertise we have gathered. At the same time, we hope to open up the discussion and demonstrate some of the opportunities and potential for optimization that the technology offers.



Our Change Request was not approved...

Why the CR was not approved

- The design and operation of an NSP would involve numerous entries and edits through out the MAHC, not providing easy access to all NSP guidelines.
- A NSP “Section” would provide easier reference.
- Need to “get it right” for consideration in the MAHC 2024.

GOOD NEWS... an Ad Hoc Committee will be formed in Q1 of 2022

- Objective will be to develop a new SECTION within the MAHC to address the guidelines for Public NSPs.
- Specific attention toward biological filtration instead of Chemical treatment
- Address unique filtration and circulation requirements.



Next Steps...

- Membership discussion and Vote by the CMAHC on the 4th Edition of the MAHC
 - will occur during the World Aquatic Health Conference. –Virtually this year.
- Supported changes will be implemented in June of 2021.
- Ad Hoc Committee will form in the first quarter of 2022 with a CR to include Public NSP Section in the 5th Edition of the MAHC. (June 2024)
- Until then, Local Governing Authorities have the means to grant a “variance” to the current code, to allow a public NSP.
- IOB opportunity:
 - Create Materials (DATA) regarding Efficacy of biological filtration
 - Provide testimonials of success
 - Create an IOB committee to assist
 - Provide a unified message for