



NATURAL SWIMMING POOLS

TAKING THE PLUNGE IN A FRESH WATER ALTERNATIVE

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DESIGNER CONFERENCE | LANDSCAPE ONTARIO CONGRESS | JANUARY 2013

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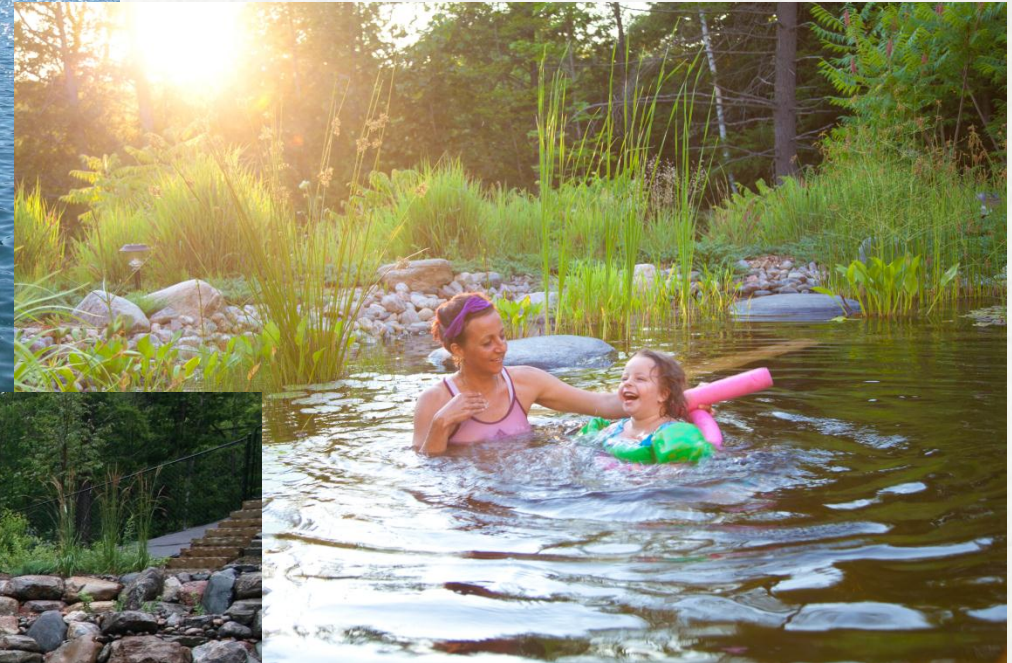
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THE REAL THING...



...A REASONABLE FASCIMILE

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WHAT IS A NATURAL SWIMMING POOL?

**A CONSTRUCTED AQUATIC
ECOSYSTEM WITH A SEGREGATED,
VEGETATION-FREE SWIM ZONE**

**CHEMICAL FREE AND ANYTHING
BUT STERILE**

**WATER QUALITY MAINTAINED
WITH BIO-FILTERS, MECHANICAL
FILTERS, AQUATIC PLANT FILTER,
AND AERATORS**

**HABITAT FOR NATIVE
FLORA & FAUNA**

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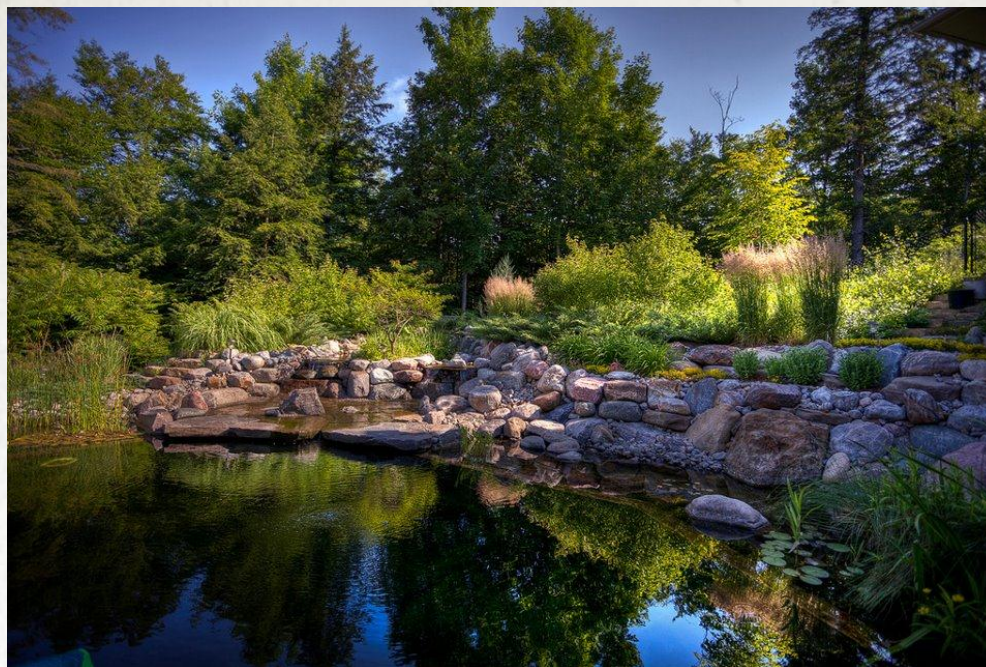
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**FILTERED GARDEN PONDS OF THE
1970's PRECURSOR TO NSP**

**FIRST NSP BUILT IN 1983 BY DI
WERNER GAMERITH IN AUSTRIA**

**BIOTOP & BIONOVA FIRST COMPANIES
TO MARKET AND INSTALL NSP's ON A
LARGE SCALE**

**NSP's EMBRACED ACROSS EUROPE &
BRITAIN**

**FIRST PUBLIC NSP CONSTRUCTED IN
GERMANY BY BIONOVA IN 1998**

**FIRST CANADIAN PUBLIC NSP TO BE
BUILT IN EDMONTON, AB**

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BENEFITS

**FRESH WATER
SWIMMING EXPERIENCE**

NO CHLORINE OR CHEMICALS

REDUCED WATER USE

SMALLER ECOLOGICAL FOOTPRINT

HABITAT CREATION

YEAR ROUND USE

AESTHETICS



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WHY NSP's ARE NOT FOR EVERYONE



**THE 'YUCK' FACTOR
BUGS, FROGS, & CRITTERS**

BIOFILM & ALGAE

MAINTENANCE

**COST
+/- \$50/SQ.F.**

**SITE LIMITATIONS / SIZE
REQUIREMENTS**



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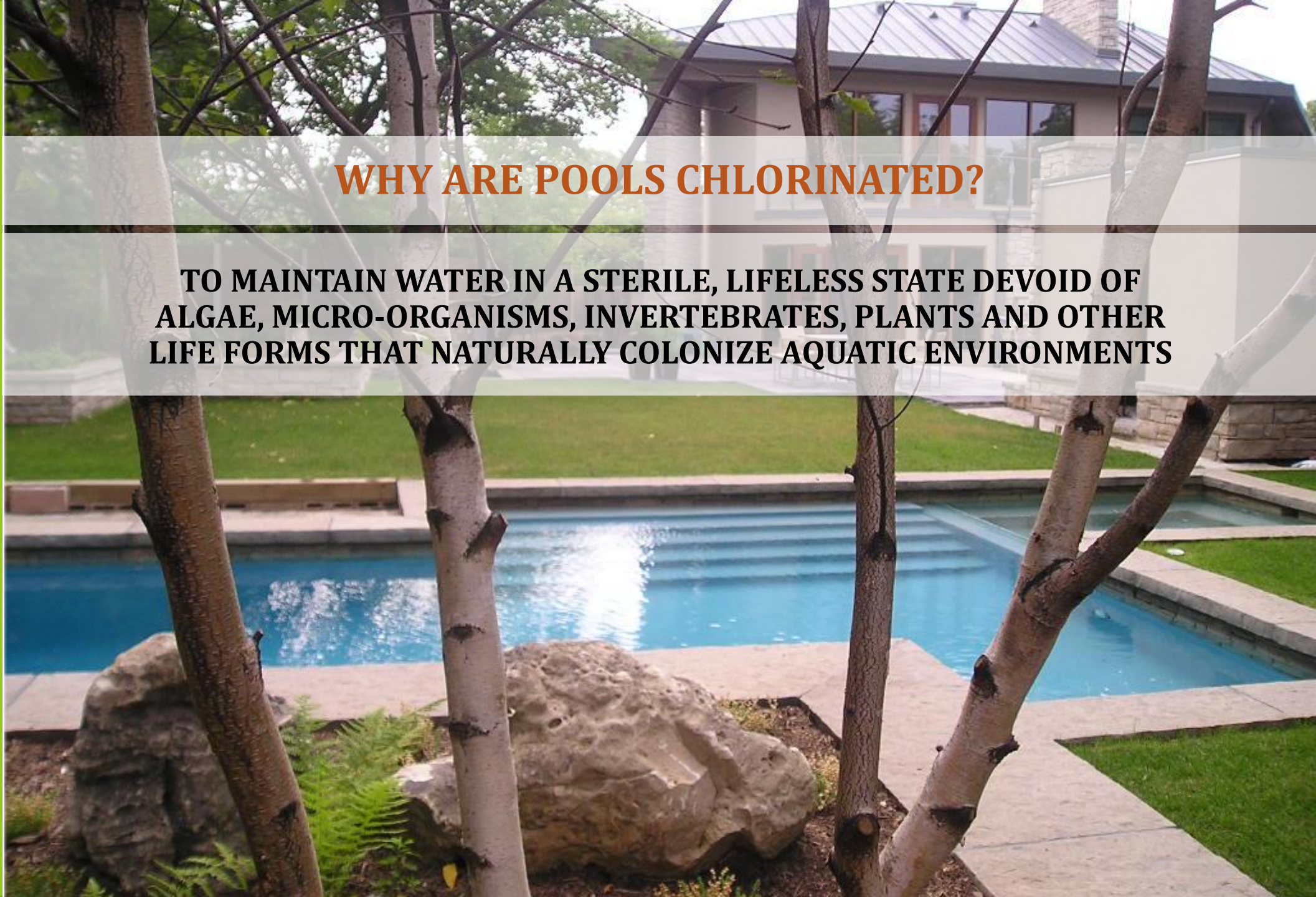
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WHY ARE POOLS CHLORINATED?

TO MAINTAIN WATER IN A STERILE, LIFELESS STATE DEVOID OF ALGAE, MICRO-ORGANISMS, INVERTEBRATES, PLANTS AND OTHER LIFE FORMS THAT NATURALLY COLONIZE AQUATIC ENVIRONMENTS



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BIOLOGICAL PROCESSES

**NSP's ARE ANYTHING BUT
STERILE**

**NATURAL MICROBIAL PROCESSES
PURIFY & CLARIFY THE WATER**

**BENEFICIAL BACTERIA COLONIZE
BIO-MEDIA WITHIN BOTH THE
POOL AND MECHANICAL
BIO-FILTERS**

**AEROBIC BACTERIA BREAK
DOWN ORGANIC MATTER,
RELEASING NUTRIENTS THAT
SUSTAIN ZOOPLANKTON
(*a natural algae predator*)
AND THE PLANT FILTERS**



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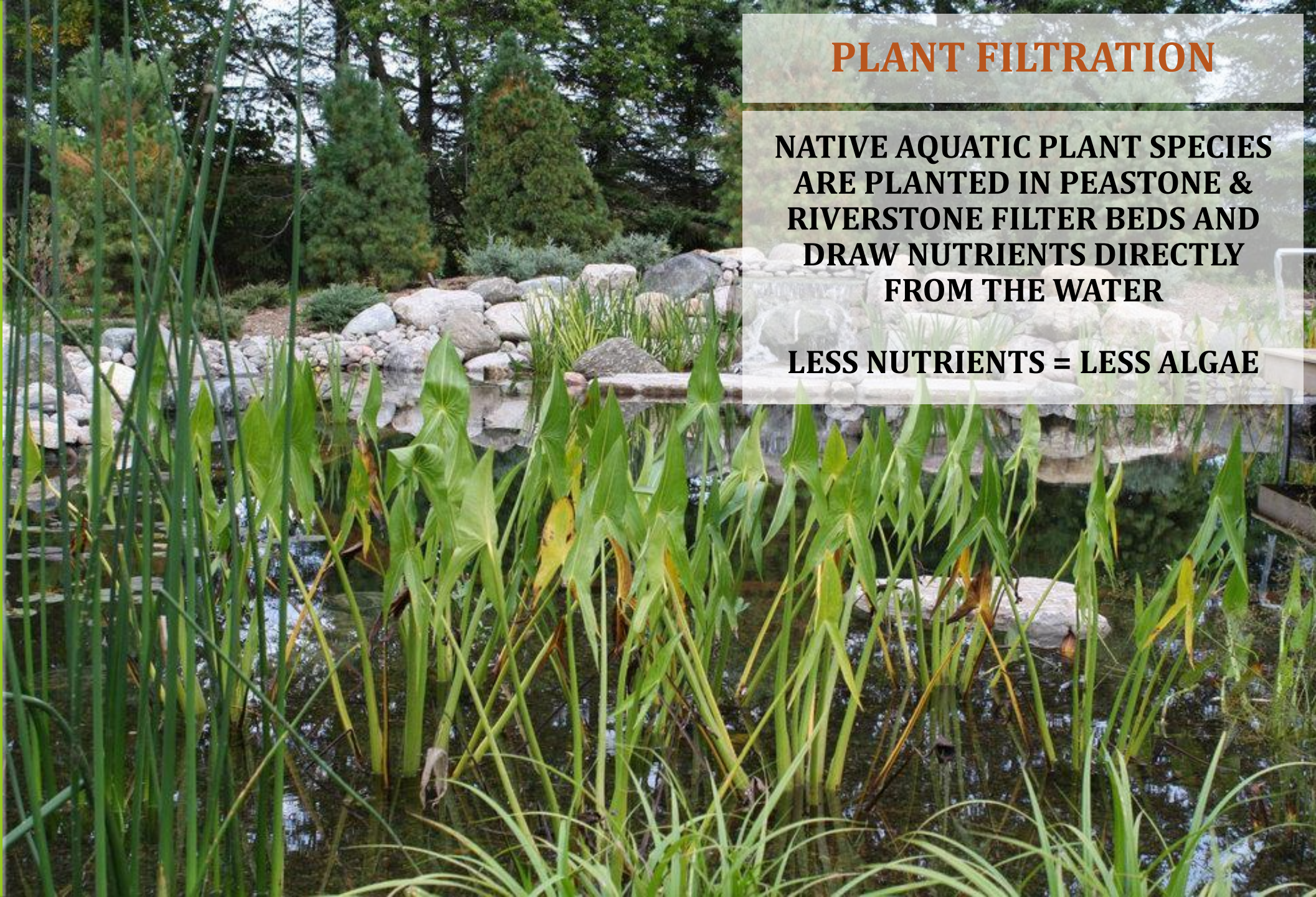
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PLANT FILTRATION

**NATIVE AQUATIC PLANT SPECIES
ARE PLANTED IN PEASTONE &
RIVERSTONE FILTER BEDS AND
DRAW NUTRIENTS DIRECTLY
FROM THE WATER**

LESS NUTRIENTS = LESS ALGAE



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MECHANICAL FILTRATION

SKIMMERS

ULTRA SONIC ALGAE CONTROLS

IONIZERS

UV FILTERS

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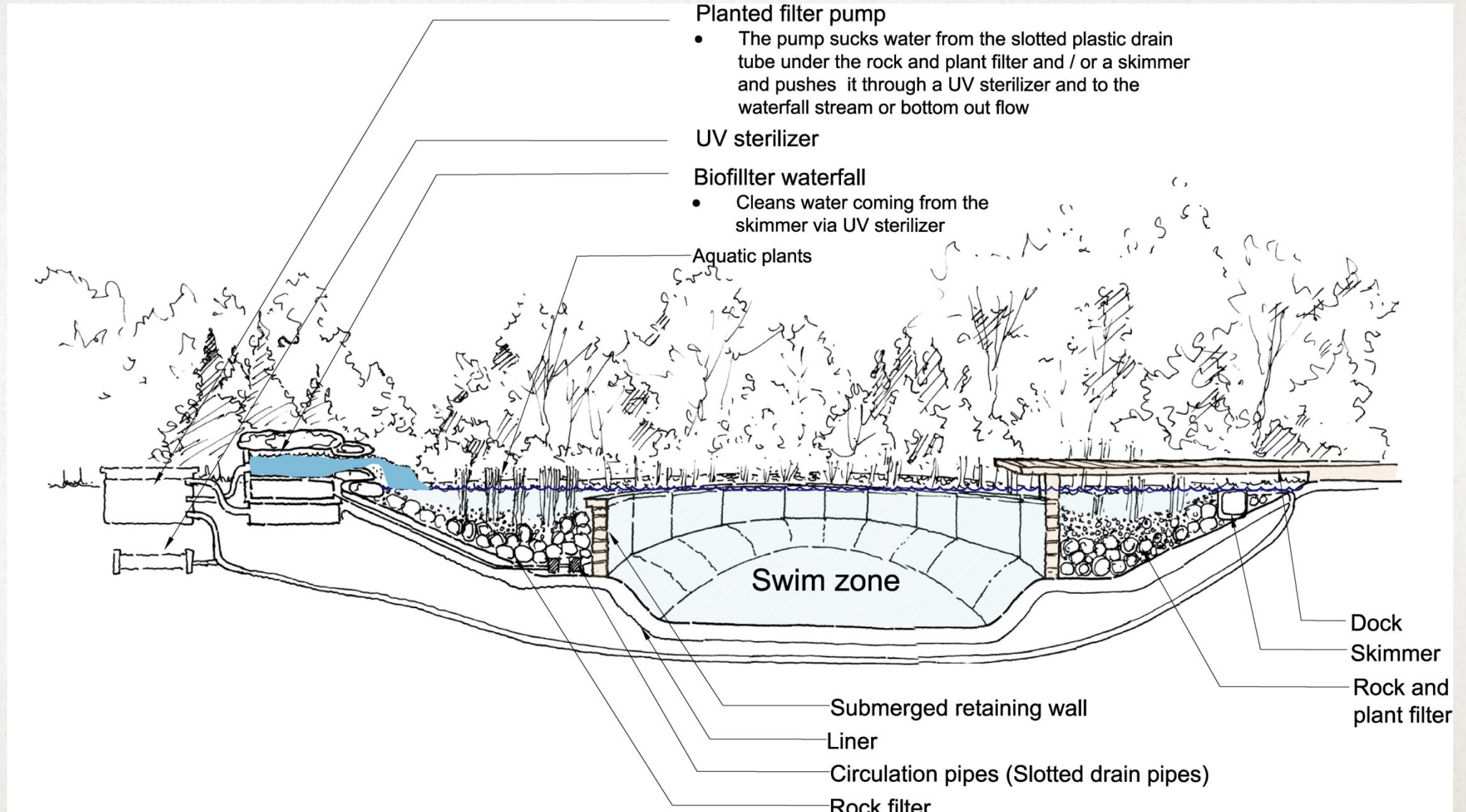
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PLANT SHELF AND SUBSTRATE DESIGN

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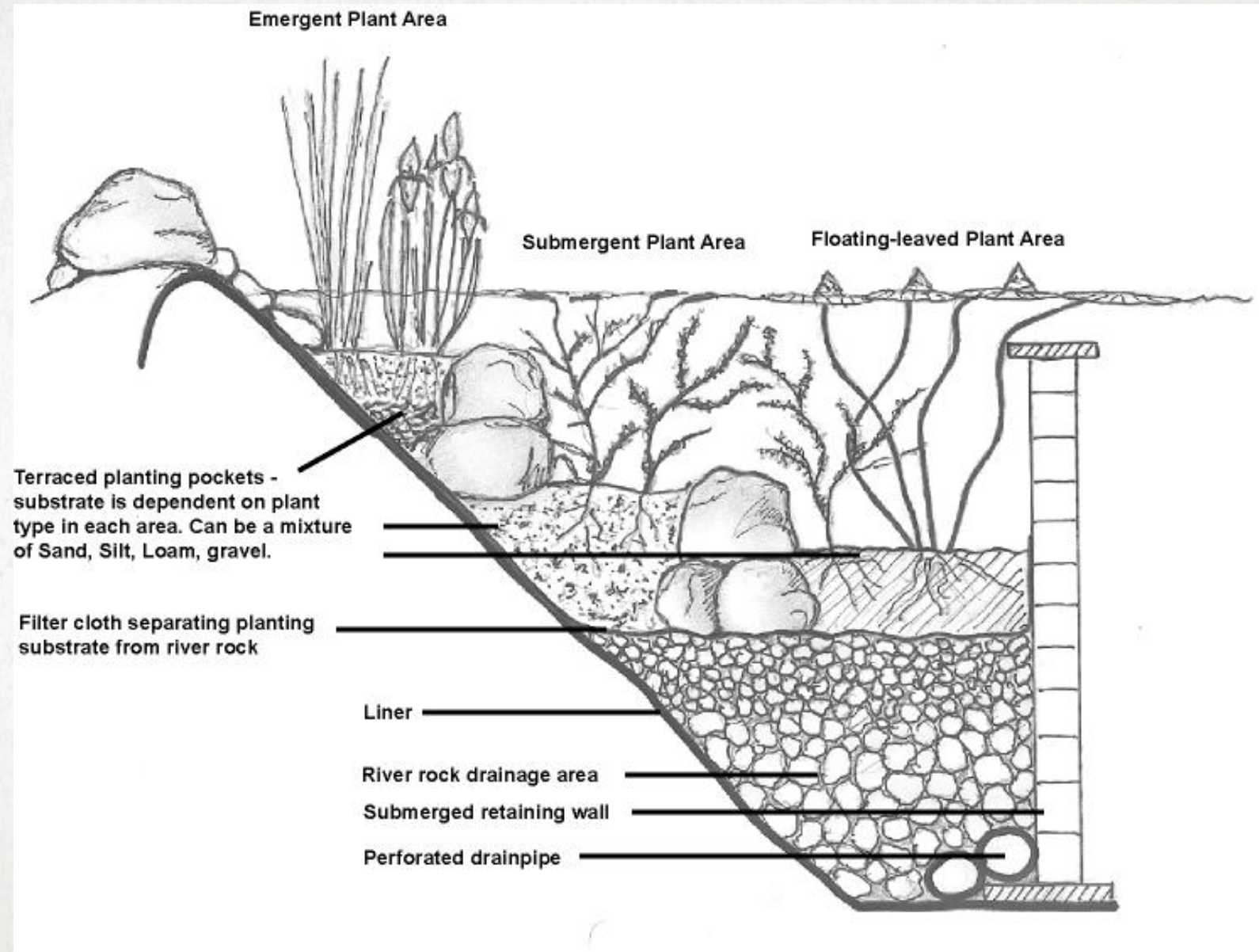
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SITE CONSIDERATIONS

GROUNDWATER / WATER TABLE

SITE DRAINAGE PATTERNS

PROPERTY SIZE

ACCESSIBILITY

**PROXIMITY TO EXISTING
NATURAL AREAS**

PROJECT BUDGET

**REGULATORY AGENCY
JURISDICTIONS**

POOL DESIGN CONSIDERATIONS

**PLANT FILTER : SWIM ZONE
RATIO**

**INTEGRATED / SEGREGATED
PLANT FILTERS**

**CIRCULATION SYSTEM
(RELATIVE TO POOL SIZE)**

MODERN VS. NATURALISTIC

GRANITE GRANITE GRANITE

**SWIM ZONE RETAINING WALL
MATERIALS**

WATERFALL SIZE

ACCESSORY LANDSCAPING

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KEEPING IT CLEAN

ADD BACTERIA

SKIMMER CLEANING

IONIZER CLEANING

BIOFILTER CLEANING

SPRING / FALL CLEANOUT

DRAINAGE NOT REQUIRED

LEAF NETS

SEDIMENT REMOVAL

**PLANT FILTER
MAINTENANCE & EDITING**

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GARIEPY RESIDENCE | INNISFILL, ON | OCTOBER 2012



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FINISHED



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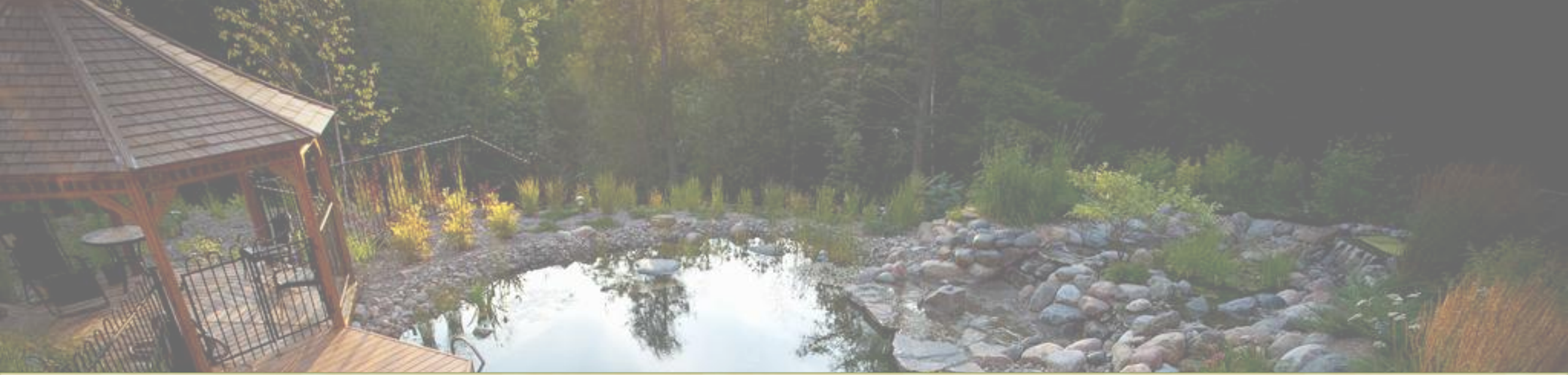
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THANK YOU

