

**INTERTEK FISHERIES CERTIFICATION (IFC)**

**1<sup>st</sup> Annual Surveillance Report**

**Waterhen Lake Walleye & Northern Pike**

**Gillnet Commercial Fishery**

**Certificate code: MML-F-163**

**Client**

**Manitoba Conservation & Water Stewardship**

**Authors**

**Howard Powles & Ian Scott**

**July 2015**

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## GENERAL INFORMATION

Table 1: CERTIFICATE & SURVEILLANCE SITE VISIT

<b>Fishery</b>	Waterhen Lake Walleye & Northern Pike Gillnet Commercial		
<b>Date of Certification</b>	24 June 2014	<b>Date of expiry</b>	23 June 2019
<b>Date of surveillance audit</b>	28 – 29 May 2015		

Table 2: UNITS OF CERTIFICATION

<b>Species</b>	Walleye ( <i>Sander vitreum</i> )
<b>Stock Name</b>	Waterhen Lake
<b>Geographical Area</b>	Manitoba, Canada
<b>Fishing Method/s</b>	Gillnet winter fishery
<b>Management System/s</b>	Manitoba Conservation and Water Stewardship
<b>Client Group</b>	Government of Manitoba, Manitoba Conservation and Water Stewardship and Department of Fisheries and Oceans / All licensed vessels
<b>Other Eligible Fishers</b>	None

<b>Species</b>	Northern Pike ( <i>Esox lucius</i> )
<b>Stock Name</b>	Waterhen Lake
<b>Geographical Area</b>	Manitoba, Canada
<b>Fishing Method/s</b>	Gillnet winter fishery
<b>Management System/s</b>	Manitoba Conservation and Water Stewardship
<b>Client Group</b>	Government of Manitoba, Manitoba Conservation and Water Stewardship and Department of Fisheries and Oceans / All licensed vessels
<b>Other Eligible Fishers</b>	None

Table 3: SURVEILLANCE AUDIT

<b>Surveillance level and type</b>	<b>Level</b>	6	<b>Type</b>	On-site
	Any changes in surveillance activity since PCDR / previous surveillance report		None	
<b>Surveillance number</b>	1st Surveillance		X	
	2nd Surveillance		<input type="checkbox"/>	
	3rd Surveillance		<input type="checkbox"/>	
	4th Surveillance		<input type="checkbox"/>	
	Other (expedited etc)		<input type="checkbox"/>	
<b>Surveillance program changed?</b>			<input type="checkbox"/>	
<b>Surveillance team</b>	<b>Lead assessor:</b>	Ian Scott		
	<b>Assessor:</b>	Howard Powles		

Table 4: CONTACT DETAILS

<b>CAB name</b>	CAB	Intertek Fisheries Certification Ltd (IFC)
<b>CAB contact details</b>	<b>Address</b>	10a Victory Park, Victory Road Derby DE24 8ZF, UK
	<b>Phone/Fax</b>	01332 275 741
	<b>Email</b>	<a href="mailto:fco@intertek.com">fco@intertek.com</a>
	<b>Contact name</b>	Ian Scott
<b>Client contact details</b>	<b>Address</b>	Manitoba Conservation & Water Stewardship, Fisheries Branch Box 20 – 200 Saulteaux Crescent Winnipeg, MB R3J 3W3, Canada
	<b>Phone/Fax</b>	(204) 945-7811
	<b>Email</b>	<a href="mailto:Bill.Galbraith@gov.mb.ca">Bill.Galbraith@gov.mb.ca</a>
	<b>Contact name(s)</b>	Bill Galbraith

## BACKGROUND

### CHANGES SINCE LAST PUBLISHED REPORT

#### Management systems

The Waterhen Lake winter commercial fishery targets two species: Walleye (*Sander vitreus*) and Northern Pike (*Esox lucius*). The harvest strategy (HS) governing the fishery was designed to sustain Walleye that is the most prone to stock collapse owing to its late maturation. The Northern pike fishery is considered sustainable under the Walleye HS as female pike will have spawned two or three times before they are susceptible to the minimum mesh size allowed in the Waterhen fishery.

The recently defined Waterhen Lake Fisheries Management Plan (Klein & Galbraith 2015) (FMP) sets out an approach to ensure the resource is protected and conserved, provides social / economic benefits to local communities, and ensures the long-term sustainability of the fisheries resource. It will be reviewed and evaluated annually by Manitoba Conservation and Water Stewardship (MCWS), Lake Waterhen Fishermen’s Association (LWFA) and the Skownan First Nation and other resource users and stakeholders such as recreational angler groups/ associations, commercial tourism lodge operators and outfitters.

The FMP integrates applicable federal and provincial legislation, policies and regulations, and recognizes existing constitutionally protected Aboriginal fishing rights to domestic / subsistence fishing, and by-laws under the Constitution of the LWFA. Only members of LWFA are eligible for commercial fishery licenses. LWFA has a number of by-laws, one of which is a limit of 22 licences.

The four stock indicators selected to manage the commercial Walleye harvest on Waterhen Lake are catch-per-unit-effort (CPUE), spawning stock biomass (SSB), spawning female age diversity (H) and total mortality (A) are assessed using lower and upper stock reference points (table 5). Those for CPUE and SSB were based on the rationale that harvest over the previous 9 years has been at a sustained high level, and that the values measured for those stock indicators are therefore desirable.

**Table 5: WATERHEN WALLEYE: SELECTED STOCK INDICATORS**

**Table 2: Summary table of performance indicators selected to govern the Waterhen Lake Walleye fishery.**

Index	Lower Limit	Upper Stock	Target
Catch-Per-Unit-Effort	2 fish per net night	5 fish per net night	6.3 fish
Spawning Stock Biomass	20 kg per 30 nets	40 kg per 30 nets	50 kg
Spawning Female Diversity	0.31	0.58	0.60
Total Mortality	70%	60%	53%

Fishery managers will review four harvest control tools in response to any changes in stock indicators shown by annual stock monitoring.

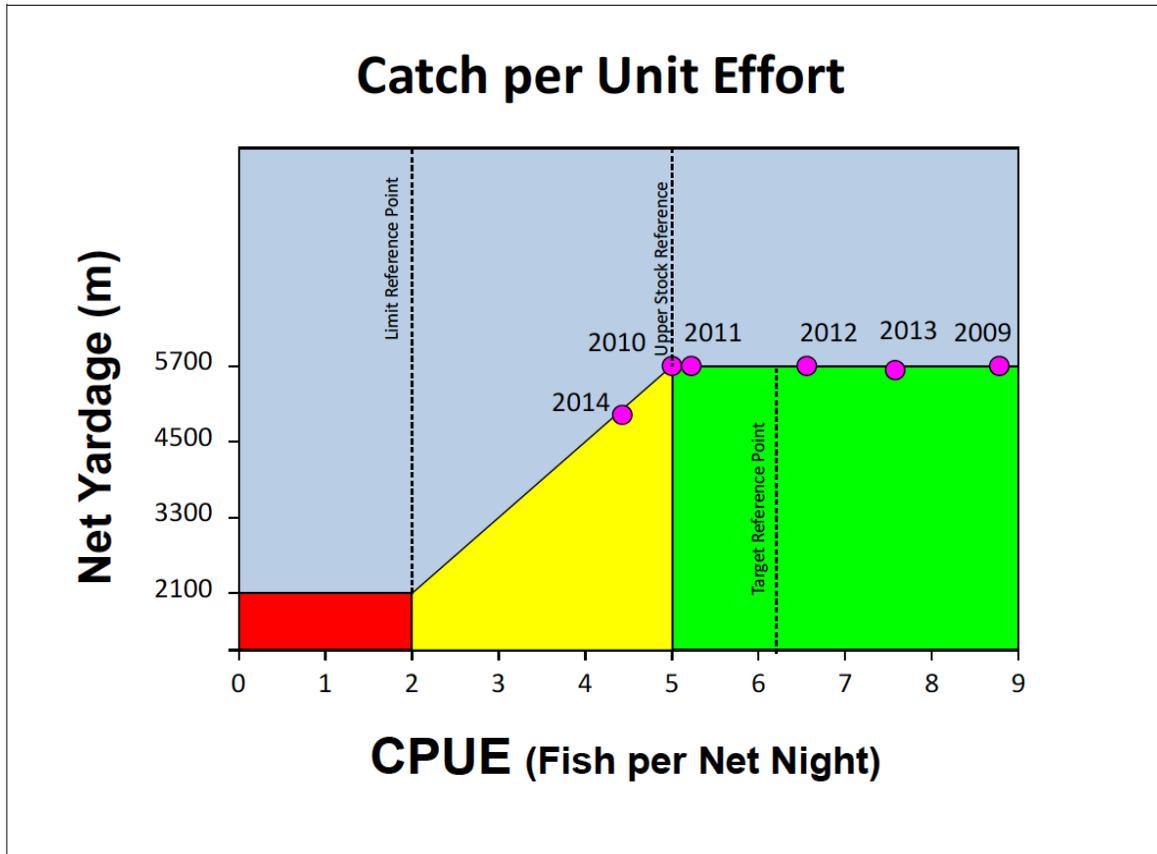
Limits on the allowable yardage for the commercial walleye fishery to reduce CPUE. In Fig. 1 pink circles mark the CPUE from the past five years of index netting. Should CPUE fall into the medium risk zone, allowable yardage in the commercial fishery would diminish.

To avoid recruitment overfishing for the Waterhen walleye stock, as SSB decreases the minimum mesh size will increase to allow more females to recruit to spawning size. Pink circles (Fig. 2) mark the SSB which is reflected as the total kilograms of gravid female walleye caught in all 30 nets of the annual index program over the past five years

When the Shannon’s Diversity Index (H) (Fig. 3) for spawning female Walleye is above 0.58 there is no maximum gillnet mesh, but values in the cautionary zone will result in a maximum mesh size of 114 mm or 108 mm to conserve and enhance age diversity among spawning females.

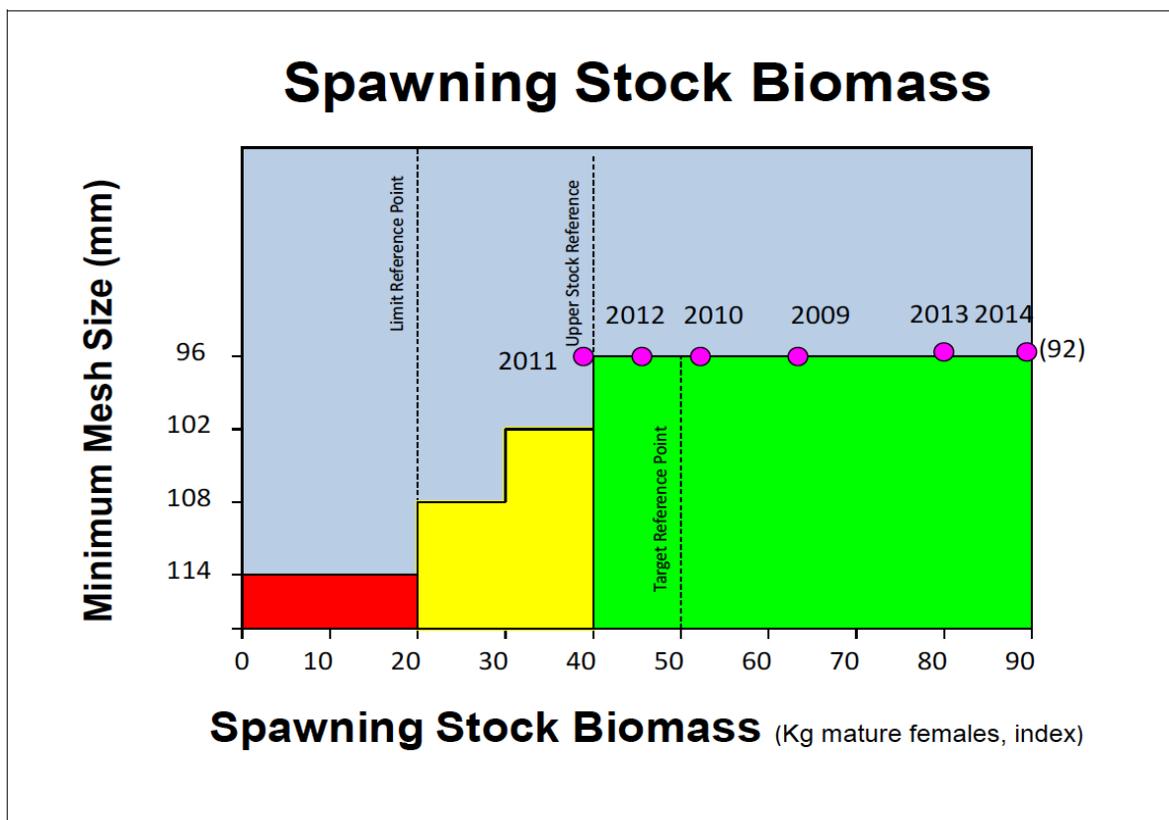
When mortality goes above 0.6 (Fig. 4), the Waterhen walleye quota will be decreased to allow the stock to rebuild.

Figure 1: WATERHEN WALLEYE: CATCH PER UNIT EFFORT



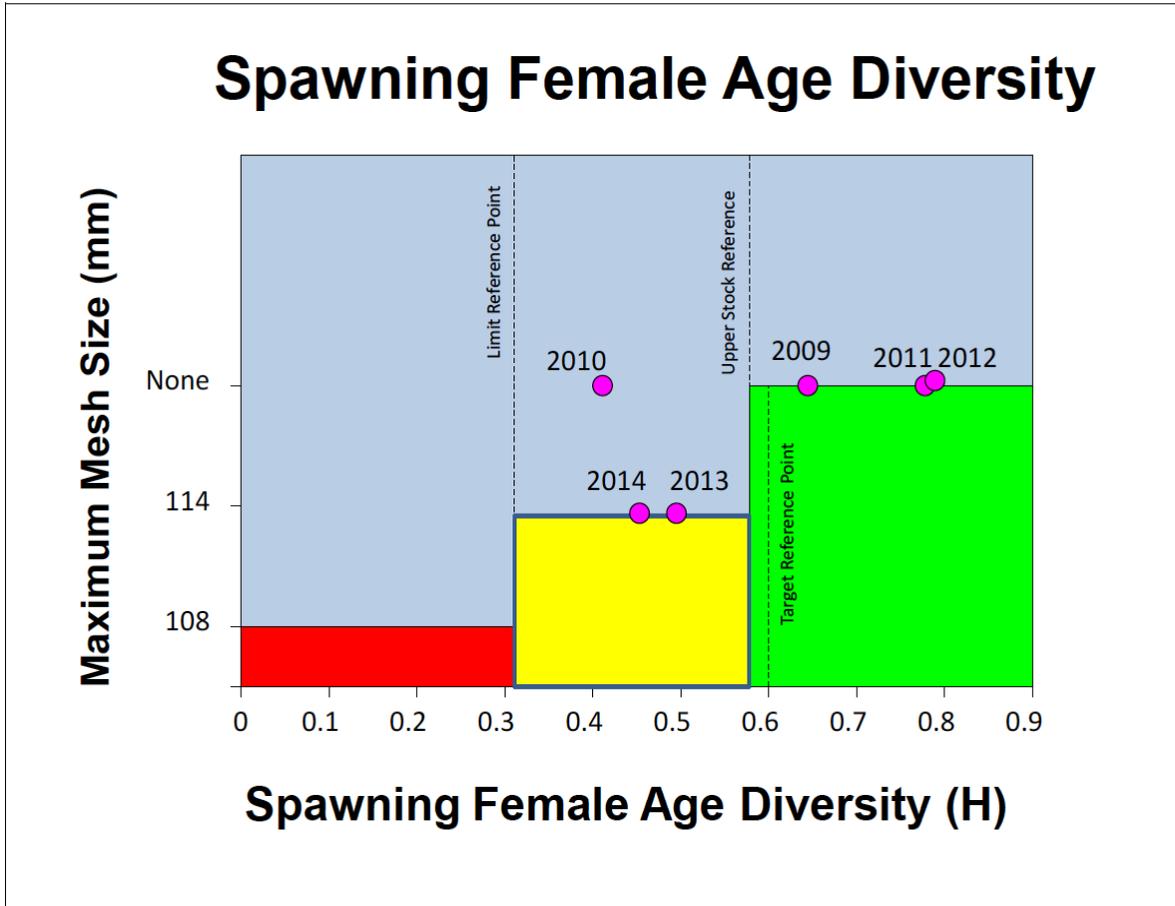
Note: Reference points and control rules. Observed values are pink circles.

Figure 2: WATERHEN WALLEYE: SPAWNING STOCK BIOMASS



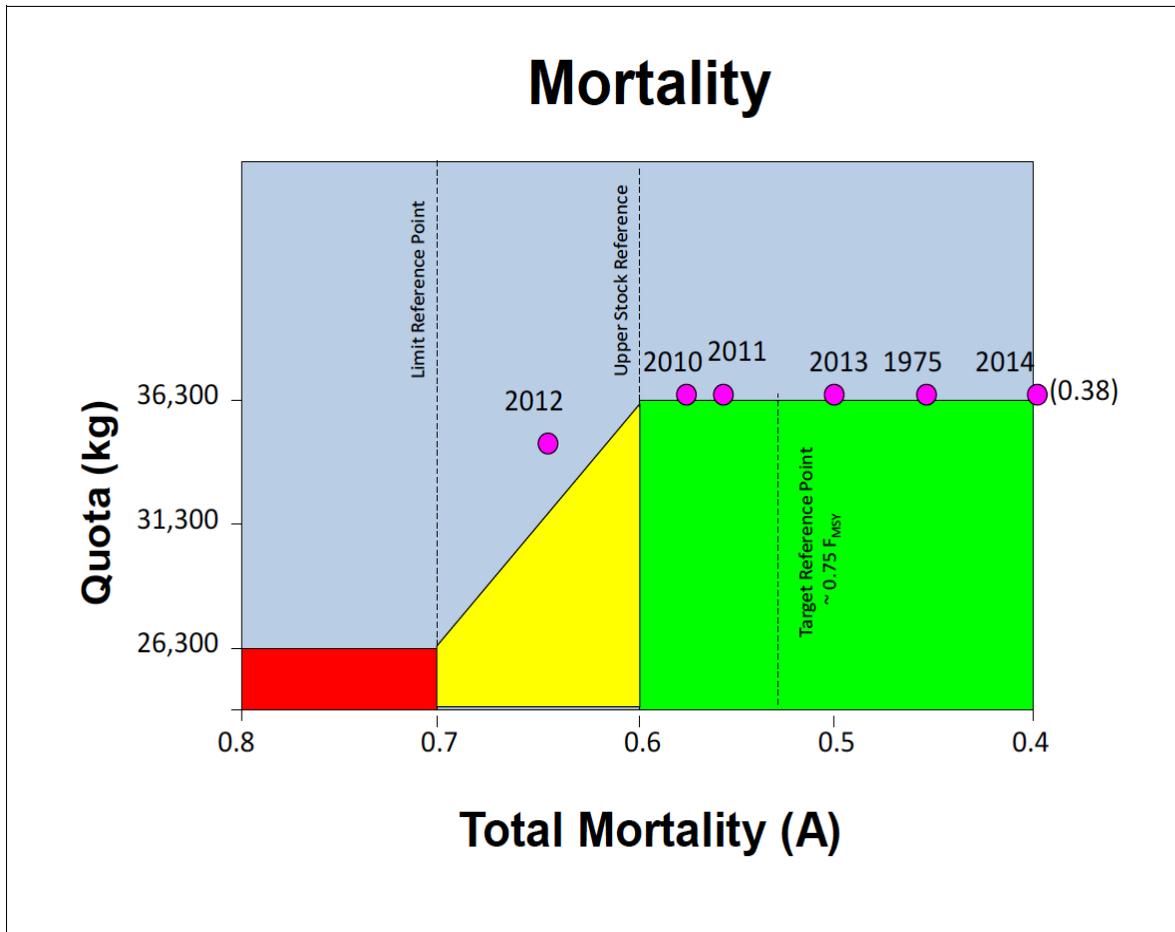
Note: Reference points and control rules. Observed values are pink circles.

Figure 3: WATERHEN WALLEYE: SPAWNING FEMALE AGE DIVERSITY



Note: Reference points and control rules. Observed values are pink circles.

Figure 4: WATERHEN WALLEYE: TOTAL MORTALITY



Note: Reference points and control rules. Observed values are pink circles.

## Relevant Regulations

Following the implementation of the FMP, a number of harvest control measures have been taken in response to the stock indicators identified in the Plan's harvest strategy for Walleye (Table 6).

**Table 6: RECENT CHANGES IN MANAGEMENT REGULATIONS**

<i>Commercial Fishing Season</i>	<i>Performance Indicator</i>	<i>Harvest Control Measure</i>	<i>Management Action / Measure</i>
2012/2013	Total Mortality	When total mortality increases higher than 60 % the lake quota for Walleye will be reduced to allow the stock to rebuild.	The lake quota on Waterhen Lake was reduced from 36,300 kg (round weight) to 34,600 kg (round weight). Subsequently the Waterhen commercial gillnet fishery was closed on Sunday, January 13, 2013 when reduced quota was reached.
2013/2014	Spawning Female Age Diversity (H)	When the performance indicator "H" is above 0.58 there is no maximum gillnet mesh, but when values fall below 0.58 into the cautionary (yellow) zone a maximum mesh size regulation of 114 mm will be imposed to conserve and enhance age diversity among spawning females by protecting larger females from harvest.	During the 2013/2014 commercial fishing season a maximum mesh size regulation of 114 mm was implemented on Waterhen Lake.
2014/2015	Catch-Per-Unit-Effort	This harvest control scheme governs allowable yardage for the Waterhen Lake commercial Walleye fishery. If CPUE falls into the medium risk zone, the allowable yardage in the commercial fishery will be diminished.	During the 2014/2015 commercial fishing season total allowable yardage per fisher was not to exceed 50 nets.
2014/2015	Spawning Female Age Diversity (H)	When the performance indicator "H" is above 0.58 there is no maximum gillnet mesh, but when values fall below 0.58 into the cautionary (yellow) zone a maximum mesh size regulation of 114 mm will be imposed to conserve and enhance age diversity among spawning females by protecting larger females from harvest.	During the 2014/2015 commercial fishing season a maximum mesh size regulation of 114 mm was implemented on Waterhen Lake.

## Personnel involved in science, management or industry

There have been no changes in personnel. The three key players (management, resource assessment and compliance) participated in the client meeting at the site audit.

## Scientific base of information - including stock assessments

### Walleye

Fig. 1 – Fig. 4 show that two of the four indicators (CPUE and H) fall in the medium risk zone and this has led to the implementation of harvest restrictions. The client considers that the lower H results from increased abundance of small individuals rather decline in large ones, although a strong year class has not entered the fishery in recent years. The potential for a favourable year class is largely dependent on environmental conditions – water level and temperature. SSB and A are both healthy.

### Northern Pike

In the main assessment (Casselman *et al*) PI 1.1.1 was completed using the risk based framework. The PSA score was 80.1 and that for the SICA was 100.

MCWS reports that the IFC assessment team recommended that there should be commercial sampling of the Northern Pike catch to better understand its stock structure in Waterhen and to ensure that the commercial sex ratio of Northern Pike is adequately represented in the stock assessment. In response, in the 2014 season MCWS implemented a commercial catch sampling programme with the collection of *cleithra* taken from Northern Pike caught in the commercial fishery and samples taken when fishers lift their nets and any nets seized during enforcement activities. Sex, age and length are recorded together with the mesh size of the commercial gillnet.

**UPDATES ON ENHANCED FISHERY’S POSITION IN RELATION TO SCOPE CRITERIA**

Not relevant.

**ANY DEVELOPMENTS OR CHANGES WITHIN THE FISHERY WHICH IMPACT TRACEABILITY OR THE ABILITY TO SEGREGATE BETWEEN FISH FROM THE UNIT OF CERTIFICATION (UOC) AND FISH FROM OUTSIDE THE UOC (NON-CERTIFIED FISH)**

Up until June 2015, no fish harvested in Waterhen had been sold as certified. However, at the moment a client is preparing to sell MSC product (it is about to obtain chain of custody certification) and it is anticipated that this company will take a substantial part of the certified walleye catch. As noted in the FMP (MCWS 2015), fishers tend to use Chitek Lake and Inland Lake as alternatives to Waterhen. In the past two seasons this alternative fishery has resulted in good catches in non-MS-C certified fisheries and this will need to be reflected in chain of custody procedures implemented by FFMC.

**TAC & CATCH DATA**

**Walleye**

As reported in the FMP (Klein and Galbraith 2015):

- Walleye is the only quota species. In 1980, it was set at 27,300 kg.
- Since 1980, the Walleye quota on the lake has been changed on the three occasions: in 1983 to 30,900 kg; in 1987 to 36,300 kg; and
- For the 2012/2013 commercial fishing season it was reduced to 34,600 kg as required by the harvest strategy for Walleye as established under the Lake Waterhen Fisheries Management Plan.
- The catch in 2014/2015 was 23,655 lbs (Table 7 & Fig. 5).
- During the 2013/2014 commercial fishing season, fishers decided that once 18,000 kg of Walleye had been harvested they would move their fishing efforts to Chitek and Inland lakes; and then return to Waterhen Lake in March to fish the remainder of the unharvested portion of the lake quota. The harvest level of 18,000 kg on Waterhen Lake was reached in December but the fishing for Walleye on Chitek Lake was so productive that most fishers decided not to return to Waterhen Lake and continued to fish on Chitek Lake for the remainder of the 2013/2014 commercial fishing season. Therefore the lower production level of Walleye during in 2013/2014 was not due to a lack of ability to harvest Walleye on Waterhen Lake but rather a choice not to harvest.

Table 7: WALLEYE: TAC / CATCH

<b>TAC</b>	Year	2014/15	Amount	34,600 kg
<b>UoA share of TAC</b>	Year	2014/15	Amount	34,600 kg
<b>UoC share of TAC</b>	Year	2014/15	Amount	34,600 kg
<b>Total green weight catch by UoC (KG)</b>	Year	2014/15	Amount	23,655 kg
	Year	2013/14	Amount	23,163 kg

Figure 5: LAKE WATERHEN WALLEYE PRODUCTION 1931 – 2014 (KG)

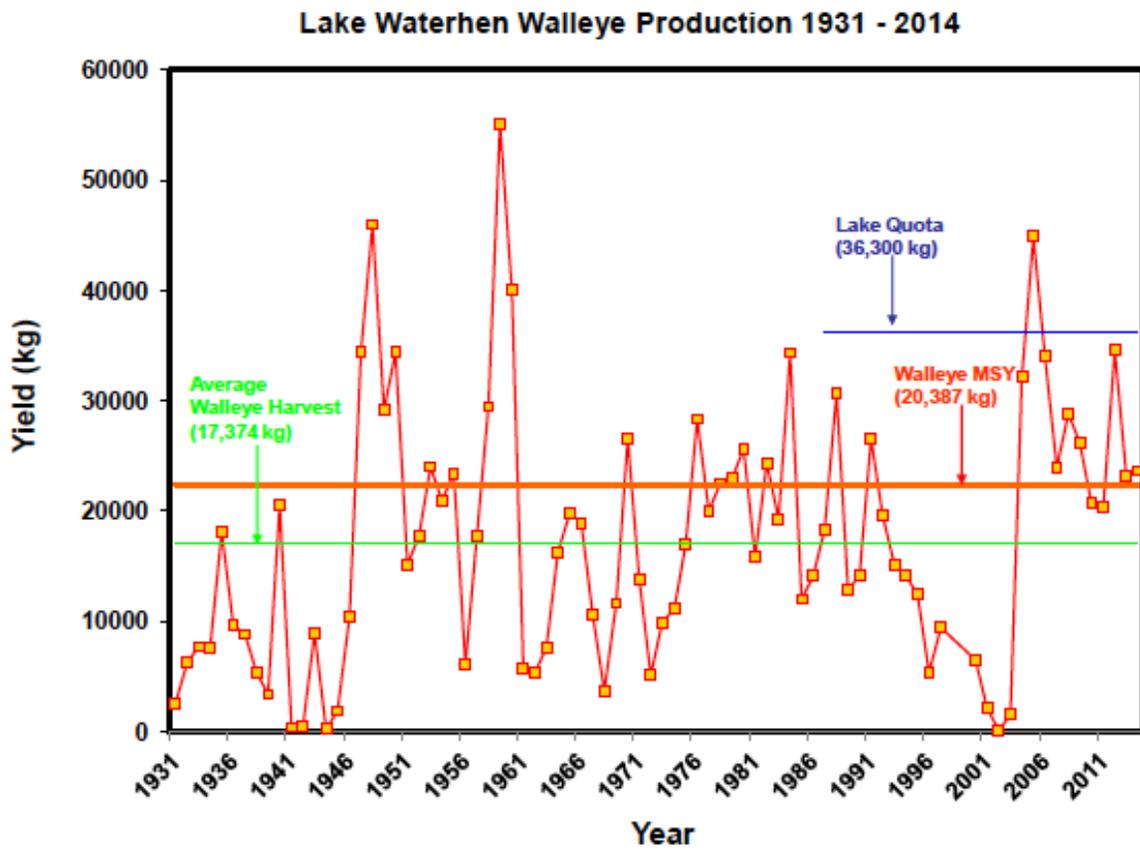


Figure 8: Lake Waterhen Walleye production from 1931 to 2014/2015 commercial fishing season.

Source: FMP (Klein and Galbraith 2015)

### Northern Pike

There is not a TAC for Northern pike (Table 8). The minimum mesh size limits and harvest control rules in place to govern Waterhen walleye stock afford sustainable fishing for Northern Pike due to the early maturation schedule of female pike relative to Walleye. Due to the low price for Northern Pike, all commercial fishing ceases on the lake when the Walleye quota is met. Experience shows that when fishing with a large mesh the walleye quota restricts Northern Pike harvest to levels well below the harvest required to result in a collapse of the fishery.

Over the years, with two notable exceptions, the annual harvest of Northern pike from Waterhen has varied between 10 mt and 35 mt (Table 8 and Fig. 6). In 2014 the catch was 17.4 mt, reflecting the shift of effort to Chitek Lake. The two catch “spikes” resulted from changes in the minimum mesh size.

Table 8: NORTHERN PIKE: TAC / CATCH

TAC	Year	2014	Amount	Fishery open to all commercial license holders with TAC on walleye acting as a choke species.
UoA share of TAC	Year	2014	Amount	
UoC share of TAC	Year	2014	Amount	
Total green weight catch by UoC (KG)	Year	2014	Amount	17,423
	Year	2013	Amount	30,588

Figure 6: LAKE WATERHEN: ANNUAL PRODUCTION OF NORTHERN PIKE (KG)

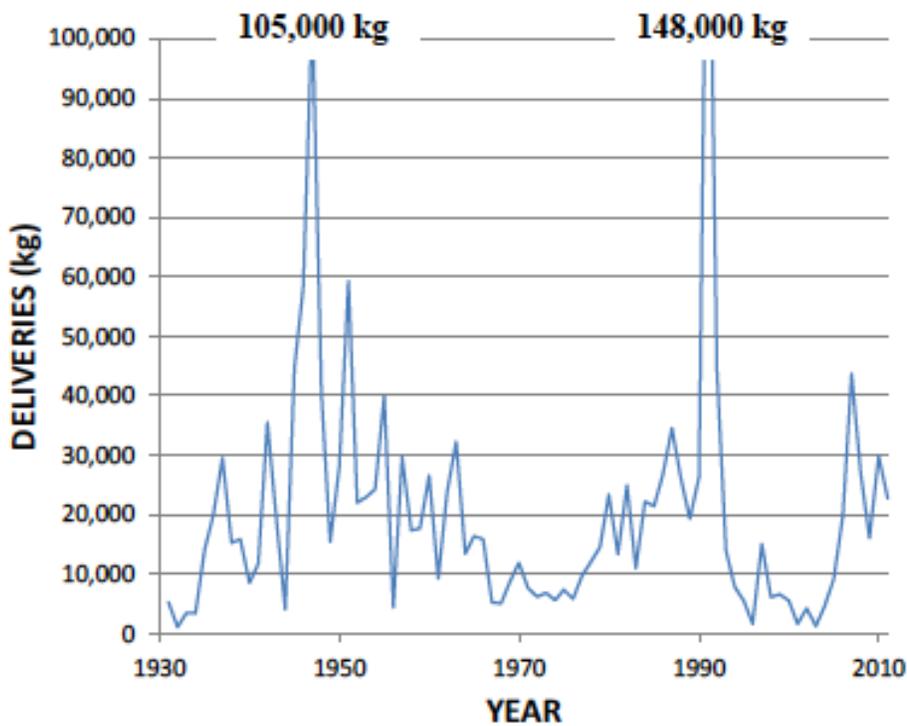


Figure 16: Annual commercial harvest levels of Northern Pike from 1931/1932 winter commercial fishing season to, and including, 2011/2012 winter commercial fishing season.

Source: FMP (MCWS 2015)

## CONDITIONS

Table 9: CONDITIONS

Condition number	Performance indicator (PI)	Status	PI original score	PI revised score
1	1.2.1 (N. Pike)	OPEN	70	NA
2	1.2.2 (N. Pike)	OPEN	70	NA
3	3.2.4 (N. Pike & Walleye)	OPEN	70	NA

## THE ASSESSMENT

### PROCESS

#### Scope and history of the assessment

The certified fishery is Waterhen Lake Walleye & Northern Pike that takes place in winter in an inland lake in the Province of Manitoba using gill nets.

IFC confirm that the fishery is in scope.

The fishery was certified according to the MSC standard on 24<sup>th</sup> June 2014 after an assessment that commenced in December, 2012.

There are two Units of Certification (UoC).

In the initial certification the scores for the UoCs were as in Table 8.

Table 10: PRINCIPLE SCORES AT CERTIFICATION

PRINCIPLE	WALLEYE	N PIKE
Principle 1 – Target Species	87.5	83.8
Principle 2 – Ecosystem	82.0	82.0
Principle 3 – Management System	88.6	88.6

## SURVEILLANCE ACTIVITIES

The audit was announced on the MSC web site 14<sup>th</sup> April, 2015 with the date confirmed on the 30<sup>th</sup> April (Appendix 3). Identified stakeholders were informed of the up-coming surveillance audit by email dated 28<sup>th</sup> April, 2015. The auditors did not receive any response from stakeholders.

The client provided a variety of information to the auditors to inform them of the situation in the fishery prior to the site visit.

The site visit took place on May 28<sup>th</sup> – 29<sup>th</sup>. The first day involved a meeting with the client in Winnipeg which facilitated a thorough review of the fishery, stock status and the progress being made to satisfy the conditions to the certification.

Howard Powles, the second member of the audit team and not part of the original assessment team, participated in the audit remotely.

**Table 11: CLIENT MEETING: MAY 28<sup>th</sup> 2015 WINNIPEG**

Ian Scott	IFC	Lead Auditor / P3	On-site
Howard Powles	IFC	P1/P2	Remote (telephone)
Bill Galbraith	MCWS	Management	On-site
Geoff Klein	MCWS	Resource Assessment	On-site
Gord Kirbyson	MCWS	Compliance	On-site

On return to their home office, the auditors prepared the draft report that was sent to the client in week beginning 7<sup>th</sup> July. Subsequently, the final report was published on the MSC web site.

## VERSIONS USED

**Table 12: MSC VERSIONS USED**

<b>MSC Sustainable Fishery Standard</b>	V1.3
<b>MSC Certification Requirements</b>	V2.0
<b>MSC Guidance to the Certification Requirements</b>	V2.0

## RESULTS

### Recommendations

In the certification report (Casselman *et al* 2014) the auditors made 12 non-binding recommendations. MCWS 2015 outlines the client’s response to these and related actions (table 13).

### Conditions

The position regarding the various conditions is shown in Tables 14 – 16.

Table 13: CLIENT RESPONSE TO CERTIFICATION RECOMMENDATIONS

Recommendation Matrix - MSC Certification of Waterhen Lake Walleye & Northern Pike Commercial Gillnet Fishery			
Recommendation	Adoption	Rationale	Implementation Plan / Strategy
<b>1 (a)</b> To better understand the stock structure of Northern Pike in Waterhen Lake, commercial-catch sampling should be conducted.	Yes		The department will work with commercial fishers and the Freshwater Fish Marketing Corporation to acquire the necessary commercial catch samples on an annual basis.
<b>1 (b)</b> The index sampling effort should be increased to catch at least 200 Northern Pike as part of the indexing program.	Partial	The Department will continue current annual index netting program.	The Department is searching for areas with high Northern Pike density and low Walleye by-catch that will augment the sample size of Northern Pike. However it is premature to commit to 200 samples of Northern Pike.
			Northern Pike.
<b>2.</b> Water temperature and water quality, particularly winter oxygen levels, be measured routinely in Waterhen Lake. This data should be collected to see whether they have any aspects of winterkill or local oxygen depletion, which would concentrate Northern Pike, while supporting a better understanding of the Walleye resource.	Yes		There will be monthly monitoring during the winter commercial fishing season for the first two years to determine if oxygen depletion occurs.

<p><b>3.</b> Validated procedures of accurately interpreting age and growth of Northern Pike be used in the future, probably using the cleithral method, in routine indexing and commercial catch sampling and that size-at-age be compared with a growth standard and used to develop age-related performance indicators.</p>	<p>Yes</p>		<p>Validated aging procedures will be used for Northern Pike.</p>
<p><b>4.</b> Various types of reproductive information be acquired and used to develop and monitor an indicator of the spawning stock of Northern Pike in Waterhen Lake. Indeed, as in Walleye, a Northern Pike index of spawning stock biomass could provide a target reference point.</p>	<p>Yes</p>		<p>The Department is currently collecting maturity schedules for both sexes in the hope of eventually developing a harvest control rule.</p>
<p><b>5.</b> Appropriate techniques are developed to annually determine mortality rate of the Northern Pike population of Waterhen Lake and that it be used as a reference-point performance indicator to assess Northern Pike exploitation on an ongoing basis, preferably refined for thermal conditions (GDD).</p>	<p>Partial</p>	<p>Currently the Department is limited to gillnet surveys which are recognized as inappropriate due to biased harvest to gravid females. Mortality rates will be calculated from the current index</p>	<p>The Department will explore opportunities to enhance its monitoring using different gear types and/or techniques.</p> <p>Ontario FWIN summary will be consulted to determine if any</p>

		<p>program to at least provide a trend in ersatz mortality rates.</p>	<p>relation to thermal conditions can be detected.</p>
<p><b>6.</b> A carefully monitored spring live-capture trap-net commercial fishery be considered and, if necessary, used to reduce disproportionately abundant prey fish, including small Northern Pike, to maintain a sustainable, high-quality commercial Walleye and Northern Pike harvest.</p>	<p>Yes</p>	<p>This will serve as a valuable management tool to adjust fish community if needed.</p>	<p>Regulations and areas where a fishery would occur will be determined in advance of a spring live-capture trap-net commercial fishery.</p>

<p><b>7 (a)</b> Log books are made compulsory as a condition of license.</p>	<p>No</p>	<p>A subgroup of sentinel fishers should be sufficient. This approach is consistent with recommendations made during the pre-assessment survey of fishery.</p>	<p>This would be implemented in conjunction with the on-site basin hole inspection program.</p>
<p><b>7 (b)</b> Part of the log book is used to record discards in order to ensure the completeness of information.</p>	<p>Yes</p>		<p>Already being conducted. Log book records two types of data: (1) retained (non FFMC) by-catch as well as (2) discarded by-catch.</p>
<p><b>8.</b> The external audit of the Fisheries Management Plan is completed in the third year of the MSC certification so that the results and the MCWS response are available to the team engaged in any re-certification.</p>	<p>Yes</p>		<p>The external review of the management plan will be completed in the third year of the MSC certification.</p>
<p><b>9.</b> The Fisheries Management Plan is considered “evergreen” to reduce the need for future staff inputs.</p>	<p>Yes</p>		

<p><b>10.(a)</b> The auditors are concerned that there may be too broad a range and subsequent overlap of size and age of fishes caught by either mesh size due to snagging, entangling, and age variation etc. to provide the protection desired, and more drastic means may be required. It is recommended that there is some evidence to support the effectiveness of mesh size selectivity to obtain the desired results.</p>	<p>Yes</p>	<p>Mesh sizes are broadly selective for age and size, particularly smaller meshes.</p>	<p>The Department will provide distributions of fish size by mesh so reviewers can assess selectivity. The Department understands that deduction of small or large Walleye will not be total, but the Harvest Control Rules will provide the greatest protection possible for age classes.</p>
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<p><b>10 (b)</b> It is recommended that assessment be conducted using specific nets to determine gill-net selectivity for Northern Pike and that selectivity curves be prepared and considered when designing performance indicators. Likewise, selectivity and catchability of Northern Pike should be taken into consideration in the FWIN index gill nets. Indeed, retention of various types of gill nets has been studied recently not only for Northern Pike but for other species, providing valuable correction factors (Walker <i>et al.</i> 2012).</p>	<p>No</p>	<p>The Department considers a consistent index netting program sufficient to track the Northern Pike population.</p>	<p>This recommendation would provide very interesting information to managers and will be forwarded as an undergraduate or Masters research project. There are simply too many gauges of twine, materials, colours and hanging ratios for the Department to undertake this recommendation.</p>
<p><b>11.</b> Currently the Waterhen gill net ice fishery targets Walleye. The retained by-catch of Northern Pike</p>	<p>Partial</p>	<p>The Department agrees with the precautionary</p>	<p>Data will be compiled in time for the 2<sup>nd</sup> annual surveillance</p>
<p>has also been certified. While it is understood that the roe of captured eggs of female Northern Pike may be extracted to provide the specific product of Northern Pike caviar, the auditors are concerned that any increase in the market value of the roe may lead to the inception of a dedicated roe fishery which may, in turn, be detrimental to stock status and may have implications for other populations in the Lake including walleye. On that basis it is strongly recommended that fishery managers regulate against a specific roe fishery until such time there may be science based Northern Pike TACs and quota that could take account of the potential catch in such a fishery.</p>		<p>approach; however, to determine the exact scope will research Northern Pike roe deliveries from Waterhen Lake to determine whether concerns of a dedicated roe fishery are warranted.</p>	<p>audit.</p>
<p><b>12.</b> Given the vintage of the data we recommend that the client reviews other sources to ensure that the Lake Winnipeg findings used to estimate the Limit Reference Point for walleye continue to be relevant or are the most appropriate.</p>	<p>Yes</p>		<p>The Department will conduct reviews of relevant literature.</p>
<p><b>13.</b> The auditors recommend an explicit definition of a habitat strategy in the Fishery Management Plan.</p>	<p>Yes</p>	<p>The Department agrees that habitat is a component of any fishery. The Department is collaborating with the University of Manitoba in monitoring edaphia characteristics of Waterhen Lake.</p>	<p>Habitat strategy will be developed which incorporates protection as outlined in the Federal <i>Fisheries Act</i> and Departmental development policies.</p>

Table 14: CONDITION 1

	PI	Insert relevant scoring issue/ scoring guidepost text	Score
<b>Performance Indicator &amp; Score</b>	1.2.1 N. Pike	SG 80 Sla. The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points.	70
<b>Condition</b>	By the fourth annual audit, the following Scoring Guideline 80 scoring issues must be met: The harvest strategy for Northern Pike is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points.		
<b>Milestones</b>	<p>At the first annual audit the client will present the Certification Assessment Body with evidence that there has been formal consideration of a harvest strategy for Northern Pike.</p> <p>At the second annual audit the client will present the Certification Assessment Body with evidence that the defined harvest strategy has been formally accepted by Manitoba Conservation and Water Stewardship and data and analysis are underway to provide the basis for development of biological reference points to support the strategy.</p> <p>At the third annual audit the client will present the Certification Assessment Body with the analytically determined biological reference points.</p> <p>At the fourth annual audit the harvest strategy for Northern Pike will reflect findings on the stock status in relation to the defined reference points.</p>		
<b>Client action plan</b>	<p>In the first year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will undertake the following activities:</p> <ul style="list-style-type: none"> <li>• Expand the effort to increase the sample size of Northern Pike as part of the Branch’s on-going annual indexing program.</li> <li>• Start an annual commercial catch sampling program for Northern Pike as part of the Branch’s data collection activities in support of effective monitoring and analysis that is part of a formal harvest strategy for sustainable management of the Northern Pike fishery.</li> <li>• Discuss with the Waterhen Lake commercial fishers a precautionary approach to fishery management of Northern Pike.</li> </ul> <p>In the second year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will draft a harvest strategy in full consultation with the Waterhen Lake Fishermen’s Association including related associated specific harvest control rules &amp; other management actions for Northern Pike. Manitoba Conservation and Water Stewardship (Fisheries Branch) will analyze data and information from Waterhen Lake and other sources to identify potential limit and upper stock reference points for Northern Pike together with related stock performance indicators.</p> <p>In the third year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will provide the Certification Assessment Body with the outcome and results of discussions with Waterhen Lake commercial fishers and other stakeholders on potential harvest control rules, biological reference points and performance indicators.</p> <p>In the fourth year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will provide the Certification Assessment Body with evidence of the use of biological reference points to inform the management decision making process as part of a formal harvest strategy, together with evidence of the defined harvest control rules.</p>		
<b>Client Progress Report 2015</b>	<p>The FMP (Klein &amp; Galbraith) represents a formal approach to the management of the fishery that (Page 4) must be conducted in a manner that does not lead to over-fishing or depletion of the harvested populations and, for those populations that are depleted the fishery must be conducted in a manner that demonstrates activities leading to stock recovery. This includes Northern Pike.</p> <p>The harvest strategy governing the fishery was designed to sustain walleye that is the species most prone to stock collapse owing to its late maturation. The Northern pike stock is considered sustainable under the Walleye harvest strategy, because female pike will have spawned two or three times before they are susceptible to the minimum mesh size</p>		

	<p>allowed in the Waterhen fishery.</p> <p>The first part of developing a specific Northern Pike harvest strategy was to improve the information base. (i) Index netting is carried out each year in the month of September when water temperatures fall to between 10 and 15 degrees Celsius. Weight and length are recorded for all fish caught. The sample size for Northern Pike has been expanded to at least 200 specimens as part of the Fisheries Branch’s on-going annual indexing programme. To date it has proved difficult to obtain a larger sample size for pike in this program and further consideration is being given to approaches to improving sampling. (ii) Starting in the winter of 2014, a commercial catch sampling programme was established to better understand the stock age structure of Northern Pike, with the collection of <i>cleithra</i> taken from samples caught in commercial gillnets, from lake patrols when fishers are lifting their nets and from nets seized during enforcement activities. For the commercial fishery samples sex, age and length are recorded as well as the mesh size of the commercial gillnet. (iii) On-site (basin hole) inspections to estimate the number of discards.</p>
<p><b>Auditor Observations 2015</b></p>	<p>The milestone for 2015 required that client present the CAB with evidence that there has been formal consideration of a harvest strategy for Northern Pike. A harvest strategy is composed of linked harvest control rules, tools, monitoring, and assessment method to ensure that management achieves its objectives. The fishery for Northern Pike has to be seen in the context of the main commercial fishery in the lake for Walleye. A number of actions are required to develop a specific strategy to reduce the risk that Northern Pike be over fished and define appropriate harvest control rules and tools. The prime need is to develop the information base. The client response to recommendations 1a, 1b, 2, 3, 4, 5, 6, 7 and 10a show the commitment to implementing the action needed to meet this condition. The client reported difficulty in reaching the required sampling number in the first year due to weather conditions (flooding) affecting the availability of the species. In addition, there were no formal discussions with fishers on an appropriate harvest strategy for Northern pike.</p> <p>However, as these were part of the client action plan (and the auditors consider that it may not be appropriate to involve fishers while there is uncertainty about stock status and the options for a harvest strategy and related harvest control rules and tools) this does not influence our finding that with the completion of the FMP and the various activities summarised in the Action Plan, the client has met the milestone established for the first annual surveillance audit.</p> <p>The timing of the second annual audit has been set to take place during the season (i.e. in November 2016). This will allow the client to present the information on the approach to the Northern Pike fishery in the 2016 – 17 season and the pre-season meetings with fishers. The CAB will also look for the results (potentially preliminary) of any new stock assessment using the results obtained from increased sampling.</p>
<p><b>Status of condition 2015</b></p>	<p>The client is on-target. Condition 1 remains open.</p>

Table 15: CONDITION 2

	PI	Insert relevant scoring issue/ scoring guidepost text	Score
Performance Indicator & Score	1.2.2 Northern Pike	SG80 Sla. Well-defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	70
Condition	By the fourth annual audit, the following Scoring Guideline 80 scoring issues must be met: For Northern Pike, well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.		
Milestones	<p>At the first annual audit the client will present the Certification Assessment Body with evidence that there has been consideration of the appropriateness of existing Harvest Control Rules for Northern Pike and, that options have been identified.</p> <p>At the second annual audit the client will present the Certification Assessment Body with evidence that the identified options have been discussed with stakeholders and may be implemented according to the status of the stock in the context of the harvest strategy.</p> <p>At the fourth annual audit there will be evidence that the harvest control rules required by the strategy have been implemented as required and in accordance with the stock status.</p>		
Client action plan	<p>In the first year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will undertake the following activities:</p> <ul style="list-style-type: none"> <li>• Expand the effort to increase the sample size of Northern Pike as part of the Branch’s on-going annual indexing program.</li> <li>• Start an annual commercial catch sampling program for Northern Pike as part of the Branch’s data collection activities in support of effective monitoring and analysis that is part of a formal harvest strategy for sustainable management of the Northern Pike fishery.</li> <li>• Discuss with the Waterhen Lake commercial fishers a precautionary approach to fishery management of Northern Pike.</li> </ul> <p>In the second year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will draft a harvest strategy in full consultation with the Waterhen Lake Fishermen’s Association including related associated specific harvest control rules &amp; other management options/actions for Northern Pike. Manitoba Conservation and Water Stewardship (Fisheries Branch) will also analyze data and information from Waterhen Lake and other sources to identify potential limit and upper stock reference points for Northern Pike together with related stock performance indicators.</p> <p>In the fourth year of certification, Manitoba Conservation and Water Stewardship (Fisheries Branch) will provide the Certification Assessment Body with evidence of the use of biological reference points to inform the management decision making process as part of a formal harvest strategy, together with evidence of the defined harvest control rules.</p>		
Client Progress Report 2015	<p>As covered in the FMP (Klein &amp; Galbraith 2015):</p> <p>The 105 mt catch spike in the 1940s following use of 83 mm mesh with the subsequent return to 102 mm mesh did not appear to collapse the Northern Pike stock. In contrast, the 148 mt removal (5.5 kg/ha) in 1991 and sustained 76 mm use did. The use of small mesh catches all sizes of pike, many before they are able to spawn for the first time.</p> <p>A study of Northern Pike in Waterhen found female Northern pike to be sexually mature at two years of age (2-year olds were 100% mature, n=5; 3 year olds were 93 % mature, n=14). The 96 mm minimum mesh in Waterhen catches fish 5 years and older, thus female Northern Pike are afforded two or three spawning seasons before harvest and this is sustainable.</p> <p>On that basis it is considered that the minimum mesh size limits and harvest control rules in place to govern walleye fishing also afford sustainable fishing for Northern Pike due to the early maturation schedule of female Northern Pike relative to Walleye. All commercial fishing ceases on the lake when the Walleye quota is met, and the historical record shows</p>		



	<p>that when fishing large mesh the walleye quota restricts Northern Pike harvest to levels well below the harvest required to collapse the fishery.</p> <p>The FMP also restates other tools – closed areas and limitation on net length – that could be considered to reduce effort in the Northern pike fishery. In relation to recommendation 11, the client is considering the need for regulation of the roe fishery.</p>
<b>Auditor Observations 2015</b>	<p>The milestone for 2015 required that client present the CAB with evidence that there has been consideration of the appropriateness of existing Harvest Control Rules for Northern Pike and, that options have been identified.</p> <p>The FMP shows that the appropriateness of existing harvest control rules has been considered and that there are options available.</p> <p>The timing of the second annual audit has been set to take place during the season (i.e. in November 2016). This will allow the client to present the information on the approach to the Northern pike fishery in the 2016 – 17 season and the pre-season meetings with fishers.</p>
<b>Status of condition 2015</b>	The client is on-target. Condition 2 remains open.

Table 16: CONDITION 3

	PI	Insert relevant scoring issue/ scoring guidepost text	Score
<b>Performance Indicator &amp; Score</b>	3.2.4 Northern Pike & Walleye	SG80 Slb. Research results are disseminated to all interested parties in a timely fashion.	70
<b>Condition</b>	By the second annual audit, the following Scoring Guideline 80 scoring issues must be met: Research results are disseminated to all interested parties in a timely fashion.		
<b>Milestones</b>	<p>At the first annual audit the client will present the Certification Assessment Body with evidence that there has been consideration of how to disseminate research results in a formal established approach.</p> <p>At the second annual audit the client will present the Certification Assessment Body with evidence that research results are being disseminated in a formal established way.</p> <p>By the third audit the required minimum score for PI 3.2.4 is 80.</p>		
<b>Client action plan</b>	<p>Monitoring and research results will be disseminated to the general public through the Manitoba Conservation and Water Stewardship, Fisheries Branch website, which, within one year of Waterhen Lake becoming certified, will include a section dedicated to Waterhen Lake eco-certification. This website will include, in addition, materials related to certification efforts on Waterhen Lake including the management plan, the action plan, the certification assessment report and annual audit reports.</p> <p>Where University research is involved, theses and peer-reviewed publications will be prepared by the home organization and be available through normal University channels. In addition, these documents, links to these documents or citations for these documents (depending on copyright restrictions) will be made available to the public on the Conservation and Water Stewardship, Fisheries Branch website.</p> <p>For directly involved stakeholders and interested parties, all monitoring and research results and associated materials, including University based research projects, will be presented, discussed and distributed at the annual Waterhen Lake commercial fisher association meeting, which will be followed by a general public meeting to be held in the Waterhen Lake area.</p>		



	<p>These materials will also be made available upon request to the Department of Manitoba Conservation and Water Stewardship, Fisheries Branch or to interested parties that attend the Fisheries Branch head office in person.</p> <p>The approach stated above will provide the venue to disseminate and share information to all involved stakeholders and interested parties in a timely fashion and ensure the materials are widely and publicly available.</p>
<b>Client Progress Report 2015</b>	<p>The web site approach is being developed . An annual report on the fishery was produced in 2015 (Galbraith 2015). The FMP was updated in early 2015 and will be up-dated on an annual basis and this will include details on the research plan and the results obtained. The annual pre-season meeting with stakeholders presents the up-dates on relevant research. The Annual Report and FMP were presented to the President of the LWFA.</p>
<b>Auditor Observations 2015</b>	<p>The milestone for 2015 required that client present the CAB with evidence that there has been consideration of how to disseminate research results in a formal established approach. The use of the web site and the annual updating of the FMP meet this milestone.</p> <p>At the second annual surveillance audit the CAB will require evidence that both approaches have been maintained. If this proves to be the case it will be possible to rescore the PI and potentially close the condition.</p>
<b>Status of condition 2015</b>	<p>The client is on-target. Condition 2 remains open.</p>

## CONCLUSION

The assessment team conducting the 1<sup>st</sup> surveillance audit confirms that the client has met the requirements for continued certification to the MSC Principles and Criteria for Sustainable Fishing. Also, the assessment team concludes that the evidence and information provided by the client as verified by the auditors confirm the commitment to meeting the conditions of certification.

The assessment team recommends the continued certification of the Waterhen Lake Walleye & Northern Pike Gillnet Commercial Fishery against the MSC standard.

The second annual surveillance audit should take place in November 2016.

## REFERENCES

Galbraith W. 2015 Waterhen Lake Summary Report (Inc: Chitek, Inland, Archies & Crab). Fisheries Branch Report MCWS 15/02
Klein G. & W. Galbraith. Waterhen Lake Fisheries Management Plan. Fisheries Branch Report MCWS 15/01
MCWS 2015 Action Plan to Meet Conditions of Certification & Assessment Team Recommendations for the Waterhen Lake Walleye and Northern Pike Gillnet Commercial Fishery.
Casselman J., P. Colby & I. Scott 2014. Main Assessment Report. 2014 Version 5: Public Certification Report Waterhen Lake Walleye & Northern Pike Gillnet Commercial Fishery. Intertek Fisheries Certification.

### Appendix 1. RE-SCORING EVALUATION TABLES

Not used.

### Appendix 2. STAKEHOLDER SUBMISSIONS

No submissions were received from stakeholders.

### Appendix 3. SURVEILLANCE AUDIT INFORMATION

## Marine Stewardship Council Surveillance Announcement

<b>Name of Fishery</b>	Lake Waterhen Walleye and Northern Pike Commercial Gillnet			
<b>Surveillance level and type</b>	Level	5	Type	On-site
	Any changes in surveillance activity since PCDR / previous surveillance report		The fishery was certified on 24 <sup>th</sup> June 2014. This is the first annual audit. This audit will take place at the end of May 2015 and it is intended, unless otherwise notified, that this cycle will continue for the remainder of the certification.	
<b>Surveillance number</b>	1st Surveillance		<input checked="" type="checkbox"/>	
	2nd Surveillance		<input type="checkbox"/>	
	3rd Surveillance		<input type="checkbox"/>	
	4th Surveillance		<input type="checkbox"/>	
	Other (expedited etc)		<input type="checkbox"/>	
<b>Proposed Team Leader</b>	Name		Ian Scot	
	Areas of responsibility		Lead Auditor	
	Competency criteria fulfilment details		Ian the Lead Assessor and Principle 3 team member for the assessment.	
	Onsite?	<input checked="" type="checkbox"/>	Offsite?	<input type="checkbox"/>
<b>Proposed team members</b>	<b>Surveillance team member 2</b>			

<b>[remove if not applicable]</b>	Name		Howard Powles	
	Competency criteria fulfilment details		Howard has worked on multiple MSC certification and audit teams as a P1 and P2 expert.	
	Onsite?	<input type="checkbox"/>	Offsite?	<input checked="" type="checkbox"/>
	<b>Surveillance team member 3</b>			
	Name			
	Competency criteria fulfilment details			
	Onsite?	<input type="checkbox"/>	Offsite?	<input checked="" type="checkbox"/>
<b>Audit/review time and location</b>	The audit will take place on 28 <sup>th</sup> and 29 <sup>th</sup> May 2015.			
<b>Assessment/ review activities</b>	<p>The audit will include a review of:</p> <ul style="list-style-type: none"> <li>a. Changes to the fishery and its management;</li> <li>b. Performance in relation to any relevant conditions of certification;</li> <li>c. Any developments or changes within the fishery which impact traceability and the ability to segregate MSC from non-MSC products; and</li> <li>d. Any other significant changes in the fishery.</li> </ul>			

IFC would like to encourage all stakeholders with an interest in this fishery to contact the lead assessor at [ian.scott@intertek.com](mailto:ian.scott@intertek.com) either to submit comments for consideration by the surveillance team or to ask to speak with the surveillance team directly. If you would like to do this please let us know as soon as possible so that we may schedule a suitable time for this.

It should be noted that we are using the new surveillance process as set out in the MSC Certification Requirements version 2 for this annual audit.

**Submitted by:** Paul Knapman

**Date:** 28<sup>th</sup> April 2015

**Surveillance Team**

Ian Scott

Ian is a fisheries consultant specializing in fisheries certifications, fisheries policy and fishery management issues with over 30 years of experience in the fishery sector. In recent years he has advised the Governments of Turkey, Montenegro, Serbia, Mauritius and Yemen on fisheries policy, including fisheries management, fleet development, the need for scientific research and fishery related environmental issues. He has co-prepared fisheries management plans for Turkey, Serbia and Montenegro. Ian has completed or is completing work as lead auditor and P3 specialist on assessments of Portuguese sardine, Canadian sablefish, Scotia Fundy haddock, BC dogfish, Mexican skipjack and yellowfin, UK beam trawl fisheries, U.S. dogfish, Maldives skipjack and Chilean hake. He has completed a large number of pre-assessments in Ecuador, Mexico, the USA, Canada, Portugal, Greenland and Spain. He is trained in the use of RBF. He was a key member of the MSC field trial RBF evaluation team for Peruvian and Ecuadorian mahi mahi. The BC dogfish assessment used the RBF for PI 1.1.1. The Maldives assessment is using RBF for P2 PIs. He is a trained chain of custody auditor

**Howard Powles**

Howard Powles has worked in fishery science, stock assessment, and conservation and management of fishery resources since the mid-1960's, as a working scientist, science manager, program manager, and consultant. As Director of Fisheries Science and of Biodiversity Science (1998-2004) at Department of Fisheries and Oceans (DFO) Headquarters he was active in developing ecosystem-based approaches to management, in particular approaches based on defining ecosystem objectives and indicators, and led a review of the Department's stock assessment program. Howard has been a member of MSC assessment teams for several fisheries.

**Appendix 4. ADDITIONAL DETAIL ON CONDITIONS/ ACTIONS/ RESULTS**

Not used.

**Appendix 5. REVISED SURVEILLANCE PROGRAMME**

**Table 17: SURVEILLANCE LEVEL RATIONALE**

Year	Surveillance activity	Number of auditors	Rationale
2	On-site audit	2	Level 5. Three on-site and one off-site (year 3). One person on-site year 2 and the other working remotely. Year 4 two persons on-site.

**Table 18: TIMING OF SURVEILLANCE AUDIT**

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
2	June 2016	November 2016	Under MSC CR 2.0 Para 7.23.6.1 CABs may elect to undertake surveillance audits up to 6 months earlier or later than the anniversary date, where this deviation is appropriate given the circumstances of the fishery. Given that the fishery opens from November thru March and up-dates on the status of the stocks are available immediately prior, it is considered appropriate to conduct the second site visit on-site in 2016 when the fishery is operating with a remote surveillance in year 3. Year 4 would then be on-site in November 2018 at the same time as the recertification site visit.



Table 19: FISHERY SURVEILLANCE PROGRAMME

Surveillance Level	Year 2
Level 5	Three on-site and one off-site (year 3).