

PACIFIC REGION C&P AQUACULTURE



SUBMISSION

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EXECUTIVE SUMMARY

In February 2009 the B.C. Supreme Court ruled that aquaculture is a fishery and as such the federal government, not the provincial government should regulate the aquaculture industry in British Columbia. The court ruling gave the federal government one year to develop legislation and put in place a plan to manage the aquaculture industry.

The success of aquaculture program delivery for the Department of Fisheries and Oceans will be contingent on Conservation and Protection's ability to deliver an integrated compliance and enforcement program, along with our internal Departmental partners, that is effective, sustainable and fosters public confidence and trust.

Compliance, Monitoring and Enforcement

The Conservation and Protection (C&P) program promotes and maintains compliance with legislation, regulations and management measures to achieve the conservation and sustainable use of Canada's aquatic resources, and the protection of species at risk, fish habitat and oceans. The program is delivered through a balanced regulatory management and enforcement approach including: promotion of compliance through education and shared stewardship; monitoring, control and surveillance activities; and, management of major cases /special investigations in relation to complex compliance issues. The program also works closely with its partners to ensure peaceful and orderly fisheries; makes a significant contribution to the protection of Canadian sovereignty and the identification of potential marine security threats through our extensive marine surveillance activities, and; plays a key role in the administration of the Canadian Shellfish Sanitation Program to help ensure that the public is protected from consumption of contaminated fisheries products.

Within the DFO Program Activity Architecture¹ (PAA), C&P is a sub-activity of the Fisheries and Aquaculture Management Sector. C&P is most closely aligned with DFO Strategic Outcome No. 1: *Economically Prosperous Maritime Sectors and Fisheries*.

The C&P Pacific Aquaculture compliance program is anticipated to function operationally in a closely integrated manner with the regional OHSAR-Habitat Protection and Sustainable Development program as a natural partner thereby also contributing to DFO Strategic Outcome No. 2: *Sustainable Fisheries and Aquaculture*. With this proposed program design, C&P may also contribute substantially to the DFO Operational Priority – *Sustainable Aquaculture*². Two Key Plans for the Aquaculture Program Initiative which the proposed C&P Pacific Aquaculture compliance program may contribute to directly or indirectly are:

¹ October 1, 2009

² DFO Report on Plans and Priorities

- Increased competitiveness of Canadian aquaculture, increased productivity, and increased environmental performance.
- Market recognition of Canadian products as meeting market-driven certification requirements.

C&P Pacific Aquaculture Compliance Program Links to Government of Canada Strategic Outcomes

- Strong Economic Growth
- A Clean & Healthy Environment

Conservation and Protection's (C&P) mandate will be the compliance, monitoring and enforcement of the aquaculture industry. C&P has been working with Departmental staff to develop a C&P business case and staffing proposal to address the significant increase in work load that will occur as a result of the aquaculture file.

In order to determine the staffing and resource requirements, C&P formed a working group consisting of three Regional Chiefs and two Conservation and Protection Supervisors. The group focused on Regional requirements to address monitoring and compliance needs in both the finfish and shellfish aquaculture industry primarily on the east and west coast of Vancouver Island.

The group did not take into consideration processing facilities, fish health or closed containment facilities such as trout farms and hatcheries. Consideration was not given to possible future growth of the industry into the North Coast Area and possible workload impacts in the Lower Mainland and B.C. Interior as any expansion would require a separate submission for additional resources.

The group began its analysis by first identifying elements within C&P that would be affected or impacted by the addition of aquaculture activities. Some of the elements considered were, but are not limited to, staffing, training, assets and infrastructure.

With this analysis the working group was able to identify what it felt to be reasonable recommendations with respect to the numbers of staff, equipment and resources required to do the work and the cost associated with overall program delivery. It is the recommendation of the working group that a 13 member dedicated field unit located in two offices (Tofino and Campbell River) and a 5 member Regional support unit (Appendices A & B) will be required to deliver the program with an estimated start up cost of approx. 4.7 million dollars(pages 23-26).

There may be some cost saving opportunities if there are available assets within DFO or attainable from other agencies at a reduced cost.

In order to effectively meet the needs of the Aquaculture Compliance Program, it is the recommendation of the working group that two field units be established on Vancouver Island, one in Campbell River and a second smaller unit in Tofino. This recommendation is based on the number of active finfish and shellfish aquaculture sites, their geographic locations and an analysis of:

- Operational effectiveness
- Response time
- Staff availability
- Proximity to partners
- Staffability/Work life balance

Integrated Risk Management (IRM)

As a follow up to the work done by the C&P working group, it was felt that in order to ground truth some of the results and perhaps clarify priorities it would be useful to conduct an IRM session with the participation of a cross section of key representatives from Aquaculture Management Division (AMD, OHEB, and C&P.

During this session the group identified thirteen areas they felt may present a risk to the success of the C&P program if not addressed and how those risks would impact core C&P program activities.

Conclusion

The IRM session demonstrated that C & P would be the lead in the majority of risk areas identified.

It is clear that HR/staffing challenges will pose the highest risk to program delivery followed by an effective information management system, procurement of assets and clearly identified roles and responsibilities of a staff.

In order for DFO to reach its desired aquaculture program outcomes, it is imperative that C&P initiate Fishery Officer staffing actions as soon as possible. It will also be necessary to identify immediate asset requirements in order to commence procurement processes.

Our requested resources and model will allow C&P to take a much more holistic approach to the aquaculture program while enhancing support to other sectors and our partners. This support will include the protection of Canada's international reputation guaranteeing market access as well as protection to our reputation while aligning to new standards similar to new European Union requirements designed to combat illegal, unreported and unauthorized fishing.

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INTRODUCTION

By way of this submission C&P Pacific Region is identifying the resources it requires to confidently undertake its new role in regards to aquaculture.

The submission takes into account that C&P is adopting major case management as a core function and a major component of major case management is intelligence management which provides enhanced accountability. Intelligence management is a structured process, which involves gathering and analyzing intelligence, identifying and targeting problems and evaluating results. It is based on the philosophy that the principal task of compliance management is to prevent and detect non-compliance rather than simply react to it.

The Regional Support element of the submission enables C&P to proactively address aquaculture issues relating to Program Planning and Analysis as well as Intelligence. The Regional Support provides capacity to gather the information and provide Region with the intelligence products it requires to meet the challenges of major cases. At the same time aquaculture will require development of some enforcement specialist capacities in informatics investigation, auditing and communication as well as relationship building.

The Departmental delivery of a comprehensive compliance and enforcement program will fundamentally change how aquaculture is viewed and provide C&P with capacity to not only react but be proactive. The intention is to utilize a holistic approach combining the principles of:

- relationship building,
- promoting communications,
- harnessing information/intelligence analysis,
- forecasting risk,
- proactively aligning business,
- developing intelligence products,
- inspection,
- conducting audits/investigation,
- practicing professional Major Case Management

which will build public confidence, help conserve and protect Canada's aquatic resources, support economic opportunity while ensuring Canada's domestic and international reputation is promoted/protected.

INTEGRATED RISK MANAGEMENT

The C&P Pacific aquaculture program design working group conducted an accelerated Integrated Risk Management (IRM) workshop on Wednesday November 4, 2009 in Vancouver. This step was considered essential and was conducted in an accelerated manner owing to the requirement to rapidly design and deploy a program with respect to the BC Supreme Court Hinkson decision. However, considering the advancing timeline a high level of integration was achieved.

Why conduct an IRM Workshop?

1. To provide a comprehensive objective means by which to identify the annual operational priorities.
 - *Integrated Risk Management presents an opportunity to define defensible operational priorities in response to an objective risk assessment process, enabling better utilization and justification of resources directed towards specific identified risks.*
2. To facilitate informed decisions within a context of uncertainty and a continuous change environment.
3. To link field operations to the big picture.
 - *This is a “middle down” approach; the IRM is used to identify annual operational priorities for C&P Pacific which would serve as an aspect of risk response and treatment.*

Objective:

To identify and highlight key activities and risks associated with the C&P Pacific Aquaculture Program Design (PAPD) through the use of the Integrated Risk Management module as represented through the Management Accountability Framework (MAF).

Participation:

Invitations were sent to Pacific Region C&P managers, OHSAR and FAM; to collectively bring their respective professional experience to identify key issues related to the PAPD.

There were a total of five invited guests in addition to the C&P working group including: two representatives from the Pacific Region Aquaculture Management Division, one from the Aquaculture Management Directorate (NHQ), one from Pacific Region OHSAR-Habitat Protection and Sustainable Development, and the C&P Pacific Chief of Regulations.

Exercise:

- Analysis of Draft submissions;

- Identification of the gaps that exist i.e. no prior history to format program expectations; acknowledgement that what is developed for Pacific Region may serve as a model for application by other Regions based upon legal implications; there is a need to envision what that could be;
- Identification of the "Risk Universe" – 14 Risks were identified;
- Identification of the "Activities Universe" – 7 Activities were identified;
- Identified the top four risks by each activity and the group was reasonably satisfied with the results;

In the course of this exercise, the workshop identified what were believed to be 7 activities and 14 associated risks in the design and implementation phase related to PAPD. Consensus was easily achieved through peer review. The usual step of voting followed by a process of further peer inquiry was bypassed in favour of expediency. In the absence substantive program history, heavy reliance was placed on the professional expertise within the participant group. These elements or risks are what we as a group believe to be foundational pieces in considering the design and implementation of PAPD. This is considered to be a Year 1 Forecast only.

The exercise also required that some mitigation steps were to be considered. However, based upon the limited time for this abbreviated workshop, only five of the risks are targeted for immediate action.

Next steps:

All workshop participants reached consensus in identifying, validating and embracing the next steps. We are now able to identify and assign immediate responsibilities associated with:

1. Human Resources
2. Roles and Responsibilities
3. Information Management
4. Assets
5. Communications

We believe that through this exercise, we have started the process of producing a "body of evidence" to mitigate the known risks associated with PAPD; and to utilize fundamental building blocks for this program to be able to support healthy economic activities for Pacific Region and the Province of BC. The "body of evidence" can also be utilized as learning opportunities by our colleagues in other Regions should they face similar operational/ strategic challenges.

COMPLIANCE FRAMEWORK

The C&P Branch has adopted a *three-pillar* approach to an enforcement program delivery to help meet current and future challenges. The *three-pillar* approach is further delineated under the Compliance Framework as described on pages 10 and 11. The first two pillars, Pillar One (education and stewardship) and Pillar Two (monitoring and control) would be delivered by a uniformed operational work unit. The addition of aquaculture under C&P's program will bring a number of additional challenges and demands for the existing C&P program. This submission takes into consideration Pillar Three (major case and special investigations) of the Compliance Framework as an all inclusive enforcement approach that utilizes analysts and intelligence.

The new Pacific Region aquaculture compliance program will require additional regional intelligence analysis capacity in order to support the aquaculture field detachment in investigative and compliance capability. C&P intelligence products will aid managers in making informed decisions on aquaculture compliance and enforcement issues and help to develop major cases for investigation. The use of intelligence products is expected to better enable C&P and DFO to make the maximum use of limited resources through a strategic focus on the highest risk issues. This will lead to increased performance through team success and in turn will contribute to improved staff morale and public confidence in DFO programs.

Intelligence led policing capitalizes on the day-to-day efforts of all officers and partners to produce intelligence products that reflect major cases. These intelligence products will form the basis for the C&P Director, Chiefs and Supervisors to unite area officers and Regional specialists to undertake Regional and area projects regarding aquaculture. The adoption of intelligence led policing also provides a symbiotic relationship with the program, planning and analysis process as intelligence products will reflect resource alignment and vice versa.

Link to electronic PDF of this document:

http://intradev.nrc.dfo-mpo.ca/fm-gp/Directorates/CP/CRM/Documents/SCMNCF_e.pdf

SITUATIONAL COMPLIANCE MODEL

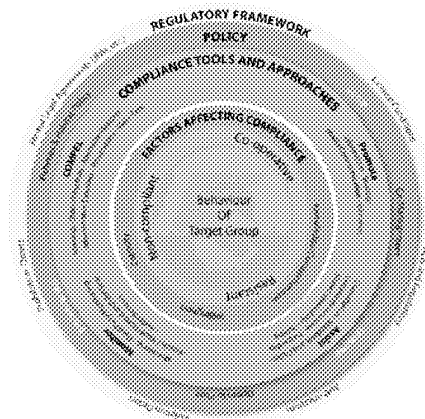
Every day the department is faced with a wide range of regulatory compliance behaviour and factors influencing these behaviours which require analysis, including an assessment of risks and potential outcomes, to determine the appropriate response, whether immediate or long term.

The situational compliance model represents the complex dynamics associated with the objective of influencing human behaviour towards compliance with DFO management objectives.

The outer ring (yellow) describes the requirement for a fundamentally sound "regulatory framework" (Aids, Regulations, Powers, License conditions, etc.). The regulatory framework and the monitoring, control and surveillance activities are co-dependent.

The second ring (green) represents the broad departmental policy objectives and strategies that need to be taken into account in the development of compliance strategies. Consequently, departmental policies need to consider how they might influence the behaviour of target groups.

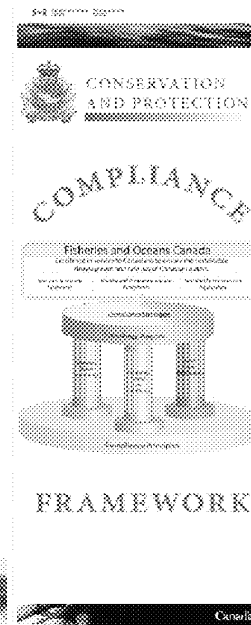
The third ring (blue), while not all-encompassing, represents the many Compliance Tools and Approaches that can be used to influence and modify client behaviour towards a compliant disposition. The approaches range from the more proactive/persuasive activities like communication, and education to more direct actions that help compel compliance such as warnings and prosecution. Effective strategies will include the appropriate mix of tools and approaches and will need to be customized to the particular compliance problems in the context of a specific fishery or a DFO sector or program.

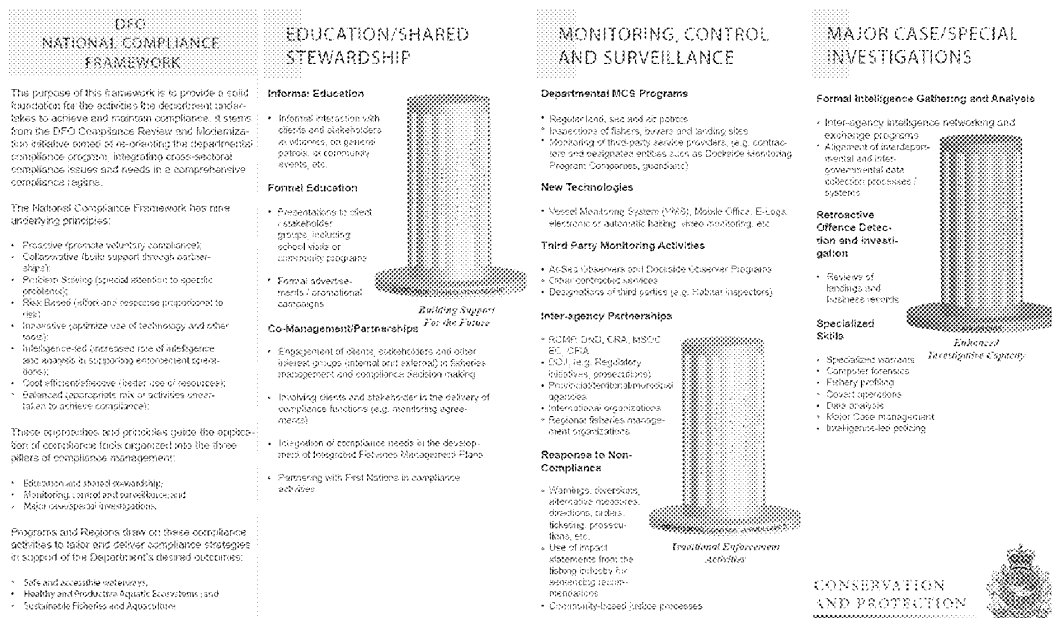


The third ring (blue) identifies the three key ingredients for compliance: knowledge and understanding of the reasons for the various rules and regulations; willingness which speaks to the main issue of whether there are adequate incentives to comply or deterrents to non-compliance; and capacity which is the ability and availability of meeting the regulatory requirements.

While all elements of the various rings are somewhat aligned with the various human behaviours of the model, there are no definitive lines throughout the model. At any given time, one or more of the compliance tools and/or strategies may be applied to a particular problem, individual, or situation.

The selection of responses is primarily based on multiple factors which must be continuously assessed. Conservation and Protection managers and fishery officers must be engaged on an ongoing basis with colleagues from other DFO sectors and industry partners in all aspects of the compliance model.





AQUACULTURE REGIONAL SUPPORT TEAM

By adopting the Intelligence Led Policing (ILP) model good business practices are adopted and C&P uses intelligence within aquaculture to develop major case initiatives. The ILP model also fosters a sense of Regional teamwork and accomplishment. To deliver the comprehensive program under the ILP model a Regional Support Team would be comprised of:

1 FTE- Investigation and Intelligence Operational Analyst

The analyst will provide the review and interpretation of information from the field, open sources, data systems, partners, and the broader intelligence community. The analyst will develop the intelligence products that will drive operational plan development and field operations.

This position will also develop the professional communications and briefing notes for senior managers, with links to Communications Branch staff, to strategically position resources and operations for future and immediate action.

1 FTE- Investigation and Intelligence Informatics Investigations

The need to obtain, secure, seize and analyze electronic data for C&P operations/investigations is critical. This person will provide the ability for C&P to conduct operations regarding electronic information related to aquaculture.

1 FTE-Program Planning and Analysis(PPA)Analyst

This position will conduct analysis of C&P records management systems, especially performance management data, to establish data quality through statistical analysis and provide strategic analysis products for the Chief, PPA. Tasks associated with this position may include: such as trends analysis, variance analysis, gap analysis, risk assessments. The position will contribute significantly to mitigation strategy development, priority setting, risk management, and resourcing strategies relating to compliance within the aquaculture industry. These efforts will contribute significantly to our internal partnerships, other government department partnerships, and other levels of government/ external agency partnerships by providing relevant information to guide the development of Memoranda of Understanding (MOU's) and Standard Operating Procedures (SOP's). This position can also contribute to better Occupational Safety and Health (OSH) practices through Task Hazard Analysis which will provide measurable benefits to C&P Pacific, other Pacific Region sectors involved with the industry and to other Regions if similar aquaculture programs are developed.

1 FTE- Recruiting Training and Development

Unique training requirements (dive program, ROV operation, etc) will place extraordinary pressures on existing training staff. An additional FTE will provide support in the staffing, training and development of competent aquaculture focused enforcement staff (including other sector staff). Efforts will be focused initially on recruiting new staff through deployment or the competitive process with ongoing

commitments to specialized new training relevant to aquaculture enforcement as well as mandatory recertification support.

1 FTE – Administrative Support

With an increase in Regional responsibility for compliance and enforcement in the aquaculture industry there will be an additional increase in administrative duties. The administrative support FTE would provide relief for the administrative pressures the expanded compliance and enforcement mandate will generate.

Aquaculture Regional Support Team Role

The Aquaculture Regional Support Team role will be to provide information, analysis and intelligence products including Project Management Plans that will bring C&P resources to bear strategically on major cases.

The Aquaculture Regional Support Team will also develop specialists that can support Region and area officers on major cases.

Key elements that must occur for success;

- 1) The dedicated C&P aquaculture field staff will conduct inspections as part of workplanning activities, providing a steady up to date flow of information for the intelligence audit team to analyze.
- 2) The focus of the intelligence team would be establishing and maintaining intelligence continuity.
- 3) The Aquaculture Regional Support Team forms part of a regional intelligence core that would allow for the integration and function of (area intelligence officers, an Area Analyst, MSOC Analyst, PPA and other intelligence elements)
- 4) The Aquaculture Regional Support Team must be resourced and supported according to its workload, which may become vast and complex requiring permanent support.
- 5) The unit must remain flexible and have clear reporting lines to the Director and Area Chiefs so that transparent and clear communication occurs.
- 6) The proposed Chief of Aquaculture will work in cooperation with the Chief of Intelligence and Investigation, who maintains a group of area support specialists.
- 7) The dedicated aquaculture field staff will take the lead in managing major aquaculture investigations with support from the rest of Region.
- 8) The Aquaculture Regional Support Team would provide expertise and support for all sectors relating to the aquaculture program (communications, legal, media, relationship, etc.)

AQUACULTURE FIELD RESOURCES & ROLES

The current aquaculture compliance and enforcement program is conducted by the BC Ministry of Agriculture and Lands (MAL) that currently employs seven staff (6 inspectors and 1 section head) in its Compliance and Enforcement (C&E) unit. The unit is located in Courtney, B.C. and provides monitoring and audit inspections for all aquaculture operations in British Columbia. The unit conducts inspections/audits for compliance with conditions of licence for all marine finfish, shellfish and freshwater aquaculture sites and hatcheries and processing facilities. They also act as initial contact for public and industry complaints with respect to issues provided under licence terms and conditions, the provincial Fisheries Act, Aquaculture Regulation and the Land Act. The C&E staff investigates escapes, and conduct dive audits for condition of net cages and their repairs. The current inspection frequency goals are for Marine finfish growout sites: 100% per year with additional inspections based on complaints and for shellfish growout sites: 25%/year; with additional inspections based on complaints. More complicated investigations are assigned to the BC Conservation Officer Service that is currently only funded to the level of .2 of an FTE for that purpose.

The DFO proposed program would consist of dedicated field units, Regional support and administration staff. These dedicated staff would conduct the compliance and enforcement inspections of each site, and conduct complaint investigations where suspected violations have occurred. Other C&P staff would be required for supporting these functions on an as needed basis. It is expected that significant training would be required for both the dedicated aquaculture group as well as broadly for all C&P staff to address this new mandated role. Staffing requirements have considered that 90% of the aquaculture industry is currently situated in or near Vancouver Island and as such the office and staffing proposed would be situated on Vancouver Island in two offices (Campbell River and Tofino) as determined by the following staffing analysis plan. Future considerations and projections would have to be considered to take into account any aquaculture industry growth.

There are currently 131 tenured finfish farm sites in the Province of BC. Projected staffing levels would account for a minimum of two annual compliance inspections of each site which would essentially double the compliance inspections conducted previously by the Provincial program. The Provincial inspection program had a target of 1 annual inspection and the 2007 annual compliance report documents that 82 inspections were achieved as those were all the active sites during the report period.

In addition benthic sampling to assess the impact that the active site footprint has on the substrate would be done in partnership with OHEB staff. Each benthic sampling assessment would take a period of two days plus travel and would involve a total of 4 staff (2 C&P + 2 OHEB). Benthic sampling would be done during peak production periods and as such only a percentage of aquaculture sites would be assessed annually.

In the spirit of partnership with OHEB consideration should also be given to joint site inspections where C & P may not play a large role but can assist OHEB with logistical support by providing vessel transport to any new proposed site. Currently new siting applications are minimal with only 2 new sites on average being proposed annually. The added benefit of attending any initial pre site inspection with OHEB is that C & P will be involved in any initial site observations which may assist in assessing a future violation should one occur at that site.

Based on data analysis of the Fisheries Enforcement Activity Tracking System (FEATS), fishery officer time in the field is based on 40% of available time to account for administrative duties, leave and mandatory training.

Given a field position has an available 260 days per annum at 40 % there are only 104 days of actual field time available per officer which is addressed by having the staffing levels identified.

The above program only accommodates monitoring and inspection components of a basic compliance and enforcement program.

An additional component would involve investigative requirements for violations encountered during scheduled inspections. It is difficult to predict investigative requirements however investigations can be long and complex which would remove a fishery officer for extended periods from the inspection function.

With 499 active shellfish sites BC MAL had indicated a 25% annual inspection was a targeted goal. Staffing levels identified above would target an enhanced response to shellfish issues and at a minimum double the annual inspections of shellfish sites.

C&P Program for Fin Fish and Shellfish and Expectations for Growth in the Industry.

Roles /Responsibilities/Activities (Non-Hierarchal)

- Pre-siting inspections for new aquaculture operations (OHEB lead with C & P support)
- Compliance Inspections for both finfish and shellfish sites utilizing predetermined checklist (C & P lead for DFO)
 - Compliance inspection of sub tidal shellfish and finfish sites by dive or ROV
- Predator Issues
 - Predator net inspections – joint dive with OHEB staff (C&P lead)
 - Predator control permit verification and compliance issues (C&P lead)
- Aquaculture operation verification boundary (C&P lead)
 - Utilize partnership with patrol vessel/ASP flights and with Provincial Lands Branch
 - Net anchor chain placement verification by dive inspection

- Complaint attendance (C& P lead)
- Benthic sampling (VanVeen grab for soft bottom, ROV for hard bottom – OHEB lead)
- Fish Health Inspections (Fish Health lead and C &P support)
- Develop protocol between RCMP and C &P for civil disobedience aquaculture sites and related activities. (C& P lead for DFO)

AQUACULTURE STAFFING ISSUES (MODELS)

In determining the location of staff to best deliver the Aquaculture Compliance and Enforcement (ACE) program a number of variables and unknowns had to be considered. Firstly, the breadth of the program has not yet fully been ascribed. The issue of whether shellfish aquaculture, freshwater contained facilities and freshwater hatcheries may or may not fall under DFO's jurisdiction. In order to move forward with the program the Aquaculture C & P Working Group (ACPWG) considered in the primary staffing models the priority of emerging issues in finfish and shellfish aquaculture.

Finfish and Shellfish Aquaculture

In considering staffing actions the ACPWG reviewed existing Provincial ACE programs, not as to staffing levels but to where Provincial staff is currently located. The ACPWG then did a critical review of the overall program scope to determine what options for staff location were to be considered with a subsequent review of those options.

In considering options both pros and cons for each option were identified and then weighting factors were assigned. The weighting factors were determined by group consensus and are not to be considered exhaustive

- staffability/work life balance

This was the ability to attract staff to a location.

- operational flexibility

Are there sufficient staff in an area that would allow varied roles i.e. dive team, large vessel operator, shift work.

- response time

Is staff located in an area so that they can respond to an issue in a timely fashion?

- staff availability

How many staff is available to address operational needs.

- proximity to partners

Is staff in the same community that partners area (OHEB, RCMP, CCG, Prov. Agencies, industry, etc.)?

In determining the value for the factor overall the group of 5 committee members individually assigned a rank of 1 to 5 based on the importance of that factor. These were then totaled. Then for each option an additional rank of 1 to 5 was assigned and totaled. The total value for each factor was then determined by multiplying the weighting by the value for that option to obtain a total overall rating.

Model #1 Single Unit Concept (Courtney/Campbell River area)

Considerations

- all staff in one office
- 45' vessel in Campbell River
- consideration for mid shore patrol vessel for Tofino
- 9m in Courtney; 9m in Tofino

Pros

- accessible to east coast sites
- socially acceptable for existing staff to locate staff in Courtney
- draw for senior staff
- staff stability in area as most staff would not want to transfer out
- acceptable response time to contentious issues(Broughton Archipelago)
- proximity to Aquaculture biologist staff/licencing/industry reps/Provincial
- ability to draw staff on short notice or assign to special projects(dive team) from a larger pool of staff
- concentration of admin staff would be easier or more effective in a larger office.

Cons

- travel costs
- more planning
- travel time 3.5 hours for West Coast issues
- response time to West Coast not practical
- public perception optics are that response time to emergent issues are not practical
- community policing issues are not addressed remotely

Weighting Factors

	<u>Weighting</u>	<u>Single Office Concept</u>	<u>Total Value</u>
		<u>Rating</u>	
○ staffability/work life balance	15.5	25	387.5
○ operational flexibility	20	21.5	430
○ response time	22	12.5	275
○ staff availability	23	21.5	494.5
○ proximity to partners	14.5	13.5	195.75
○ program effectiveness(performance)	25	13	325
		Total	2107.75

Model #2 Campbell River/Port Alberni Two Office Option

- 45' vessel and 733 in Campbell River
- 9m RHIB for Tofino and consideration for mid shore patrol vessel

Pros

- improved access response to the West Coast
- easier to staff (housing costs cheaper in Port Alberni)
- enhanced geographic focus
- increased linkages with partners
- improved public perception
- work life balance

Cons

- less staff to draw on than the single detachment
- accommodation still required in Tofino or increased travel costs and reduced availability
- does not address operational need in Tofino
- response is improved but diminished
- staff inequity for those living in Tofino

<u>Weighting Factors</u>	<u>Weighting</u>	<u>Ranking Value</u>	<u>2 Office Model</u>
○ staffability/work life balance	15.5	20	310
○ operational flexibility	20	16.5	330
○ response time	22	11.5	253
○ staff availability	23	9.5	218.5
○ proximity to partners	14.5	11.5	166.75
○ program effectiveness(performance)	25	12	300
		Total	1578.25

Model #3 Two Office Unit Campbell River/Tofino

Pros:

- we are where the work is
- increased public confidence because we are there
- improved response time
- closer interaction/collaboration/stakeholders
- operationally more cost effective
- not extra pressure on existing staff and resources(existing complement is enhanced)

- critical mass is enhanced
- possible common real property solutions in Tofino

Cons

- potential staffability/work life balance considerations in Tofino
- increase in housing costs in Tofino
- operational flexibility diminished
- potential sharing of specialty equipment (ROV, dive team, etc)

<u>Weighting Factors</u>	<u>Weighting</u>	<u>Ranking Value</u>	<u>2 Office Model</u>
○ staffability/work life balance	15.5	10	155
○ operational flexibility	20	19	380
○ response time	22	20.5	451
○ staff availability	23	16.5	379.5
○ proximity to partners	14.5	18.5	268.25
○ program effectiveness(performance)	25	21.5	537.5
Total Value			2171.25

Analysis

The above analysis results in no clear preferred model as the analysis considers all weighting factors some of which are diametrically opposed (staffability & program effectiveness) equally. When the effective delivery of a program is considered as the priority only the top ranked factors should be considered including program effectiveness, staff availability, response time and operational flexibility the office models clearly become separated.

	Model 1(One office in Courtenay)	Model 2 (Two offices; one in Port Alberni and one in Campbell River	Model 3(Two offices; one in Tofino and one in Campbell River
Top 4 Weighting Factors			
Program effectiveness	13	12	21.5
Staff availability	21.5	20	16
Operational flexibility	21.5	16.5	19

Response time	13.5	11.5	20.5
Total of Weighting Factors	68.5	60	77

When the four highest operational factors are considered there becomes a clear distinction between the three options with Model 3 ranking higher than the other two. Model 3 proposes one office in Campbell River area and the second office in Tofino. The Tofino office model meets operational effectiveness as:

- staff are placed in close proximity to finfish aquaculture operations in the Nootka Sound area as well as shellfish aquaculture in the Barclay Sound area.
- response time to emergent issues in the West Coast area is more timely with staff located in the local area
- community involvement in aquaculture is enhanced with locally situated staff
- DFO's overall presence in the community is enhanced with an increase in area staff
- public confidence and trust in DFO's abilities is increased as staff are visibly working and living in the community specifically to address aquaculture issues and concerns
- dedicated aquaculture staff in the area ensure that current staff are not redirected to aquaculture issues which may jeopardize other fishery program commitments
- complaints directly related to the aquaculture industry are responded to in a more timely fashion with local staff
- a complement of aquaculture staff added to the existing staff would enhance the critical mass in the area and would allow a greater coordinated response to emerging issues if required. As well, social networking amongst DFO staff will be enhanced with a staffing increase in the Tofino area.
- having staff in the Tofino area where there is a significant concentration of finfish aquaculture will allow for a timely response to politically sensitive issues (farmed salmon escapes, by catch issues, predator control complaints, etc.)
- C & P staff in Tofino to address the aquaculture program needs is consistent with DFO's approach of having staff in local area to address local concerns
- having C & P staff in the Tofino area dedicated to aquaculture issues identifies that it is a priority for DFO and enhances public confidence

Staffing may be more difficult in the Tofino area because of:

- lack of social amenities (pool, hockey arena, etc.)
- high cost of housing (assuming government housing is not provided)
- current lack of infrastructure (office, warehouse and vessel storage)
- educational and medical limitations

For the Campbell River office model is consistent in operational needs in that:

- staff are placed in close proximity to finfish aquaculture operations in the Broughton Archipelago and Campbell River areas as well as shellfish aquaculture in the Comox/Campbell River and Baynes Sound area.
- An office in Campbell River provides strategic access to aquaculture operations on the north west coast of Vancouver Island area (Gold River, Quatsino Sound, etc.) which although growing does not require a separate field unit office to address and dedicate staff to.
- Aquaculture industry corporate offices for both shellfish and finfish are situated in the Courtenay/Campbell River which would enhance partnerships by having aquaculture C & P staff in the same area
- Provincial representatives are currently in the Comox area making partnerships further enhanced by having C & P staff located in a similar area
- community involvement in aquaculture is enhanced with locally situated staff
- DFO's overall presence in the community is enhanced with an increase in area staff
- public confidence and trust in DFO's abilities is increased as staff are visibly working and living in the community specifically to address aquaculture issues and concerns
- dedicated aquaculture staff in the area ensure that current staff are not redirected to aquaculture issues which may jeopardize other fishery program commitments
- complaints directly related to the aquaculture industry are responded to in a more timely fashion with local staff
- a complement of aquaculture staff added to the existing staff would enhance the critical mass in the area and would allow a greater coordinated response to emerging issues if required.
- having staff in the Campbell River area where there is a significant concentration of finfish aquaculture will allow for a timely response to politically sensitive issues (farmed salmon escapes, by catch issues, predator control complaints, etc.)
- C & P staff in Campbell River to address the aquaculture program needs is consistent with DFO's approach of having staff in local area to address local concerns
- having C & P staff in the Tofino area dedicated to aquaculture issues identifies that it is a priority for DFO and enhances public confidence

Staffing concerns for the Campbell River office:

- there are no social or economic concerns in attracting staff to this area.
- current lack of infrastructure (office, warehouse and vessel storage)

In order to deliver an effective compliance and monitoring program in the aquaculture industry the proposed staffing breakdown would be consistent with the current line reporting model in place for C & P as pictured in Appendix A and briefly described below:

1 PM-06 Chief of Aquaculture Compliance and Enforcement

This position would take the lead on developing and implementing a regional enforcement program and would be the main contact for both industry and internal

partners. The Chief would take the lead on policy development, media relations in consultation with Communications and would be the main link to internal as well as external partners in the development of an integrated enforcement program. By having the lead of the program at the Chief level not only is the importance of the aquaculture mandate highlighted and if the Regional program expands the necessary infrastructure is in place.

1 PM-05 C&P Supervisor (Tofino/Campbell River)

The C&P Supervisor ensures the operational delivery of the area based program and would ensure that workplanning priorities linked to integrated risk management are addressed. Fiscal accountability, training, leave approval and the remaining key activities of a C & P supervisor would be addressed by this position.

3 GT-05 Field Supervisors (2 based in Campbell River/1 based in Tofino)

These positions ensure the operational tasking is completed by subordinate fishery officers and that compliance with all operational policies and procedures is adhered to.

2 GT-04 Fishery Officers based in Tofino

These officers would ensure compliance and enforcement in the aquaculture industry in the geographic area of responsibility primarily in the Tofino and Barkley Sound area.

5 GT-04 Fishery Officers based in Campbell River

These officers would ensure compliance and enforcement in the aquaculture industry in the geographic area of responsibility. As there is an aquaculture industry with six active fin fish sites in the Central Coast Area, one of these officers would be assigned operational duties for that area. As well the Campbell River officers would provide support and patrol functions for the aquaculture industry in the Nootka Sound area.

1 Administration

This position would provide administrative support for the dedicated field unit and Area Chief.

Future Staffing Considerations

With increasing demands for a sustainable supply of aquaculture products and the move by First Nations to embark on economic ventures the possibility for growth of the aquaculture industry and as such compliance and enforcement should consider expanded areas of responsibility as well. In considering industry growth a very real potential exists for program expansion in the North Coast area based on discussions with staff involved in First Nations negotiations as many aboriginal communities in the North view aquaculture as a viable economic opportunity. To address the increase in compliance and enforcement program in the North Coast additional new staff would be required. The additional growth of the aquaculture industry may also impact on workload in the Lower Mainland as more products would be processed at licensed facilities which may result in

illegal products being included in aquaculture shipments. To offset the increased workload in the Lower Mainland additional fishery officer resources would have to be identified as being needed to offset this projected increase in workload.

In the event that DFO's mandate expands to include closed containment, freshwater facilities and hatcheries additional fishery officer resources would be required to address compliance and enforcement concerns in the BC Interior.

The possibility for aquaculture industry growth in the above areas identified have not been accounted for in this submission as such growth is difficult to predict and as such would require a separate submission for additional resources.

DRAFT

BUDET CONSIDERATIONS

Assets for the DFO Conservation & Protection Aquaculture Program - November 2009

At the present time, all of the existing C&P assets and resources are fully subscribed to other priority programs within the Department. Therefore new resources will need to be deployed to meet the needs of the new aquaculture program. The following assets are required to conduct the operations for the new program. The costs are divided into distinctive areas; the South Coast, and the Regional Support Team.

<u>Assets</u>	<u>Comments</u>	<u>SCA</u>	<u>Regional Support</u>
Office & Warehouse & Accommodations	To be determined in conjunction with RPTS. Note that 13% of TB submission directed to RPTS. Costs must include program specific requirements. This would include any accommodation requirements.	Unknown	Unknown
Administrative System Overhead	Computer network, telephone system and hardware, printers, communication devices, Paper Management devices, fax and copier agreements per Office plus general admin costs 2 – SCA, 1-RHQ,	\$45K	\$10K
9 m RHIB's	For inshore and near shore patrols 2-SCA,	\$700K	
45 foot Program Vessel	c/w davit, winch and sleeping accommodation For 4 staff. To be utilized for remote area inspections and benthic assessments that are very complex and require specialized equipment.	\$1.7million	
Vehicles	\$50K/ vehicle includes emergency equipment 7-SCA, 1-RHQ	\$350K	\$50K
ROV (remote operated vehicle)	Remote Underwater camera with tracking equipment, sonar, and pre-survey side sonar	\$400K	
Initial Outfitting of Fishery Officers, Staff Officers	All standard field equipment issued to GD Fishery Officers including force continuum gear, radios, cameras, videos, binoculars, floatation gear, body armour, foul weather gear, boots etc @ \$10K/ FO 12-SCA, 2-RHQ,	\$120K	\$20K
Office Fit-up Equipment for each staff member (2)	Work stations, secure file cabinets, computers, chairs, book shelves, etc @ \$8K/person 13-SCA, 5-RHQ	\$105K	\$40K
Specialized Equipment	For data mining, 12 notebooks, media, etc - \$40k for Intelligence Analysts, \$20K for Program Analysts, \$5K Media/ Communications equipment, and \$3K for Admin position for Analysts, \$3K for Staffing Officer,	\$5K	\$66K
Miscellaneous Office Equipment	Document scanner, freezers, fridge, etc, 1 per office 2-SCA, 1-RHQ,	\$4K	\$2K
Dive Gear	Equipment @ \$6K per diver 6 – SCA	\$36K	
Initial Deployment costs (3)	Initial cost for Fishery Officers @ \$50K/move 9-SCA, 2-RHQ,	\$450K	\$100K
Initial Training of a recruit Troop	Cost is \$26K per recruit. 12 – SCA, 2-RHQ includes costs to replace deployments as well.	\$312K	\$52K
Specialized Training Costs (Initial Costs)	Initial training for staff in Specialized positions in RHQ, and field operations.	\$26K	\$40K
Total Asset Costs		\$4.253 million + facility costs	\$380K + facility costs

**Annual O&M Costs for the DFO Conservation & Protection Aquaculture Program
November 2009**

Item	Comments	SCA Annual Cost	Regional Support Annual Cost
Office, warehouse and Accommodation annual costs	To be determined in conjunction with RPTS. Must include all annual costs to maintain all facilities, including specific program requirements.	Unknown	Unknown
Administrative System Overhead Costs (1)	Includes lease costs for copiers, faxes, telephone system, computer & network maintenance per Office plus general administrative expenses, security 2-SCA, 1-RHQ.	\$70K	\$27K
Specialized training annually	\$3K for Regional Specialty staff and \$1K for field staff	\$12K	\$24K
Operational Costs	Based on \$16K per Fishery Officer and \$10K per Staff Officer and \$2K per administrator + annual specialty software maintenance fees	\$194K	\$50K
Deployment costs	Annual attrition costs based on 4 relocations per year within region	\$150K	
45 foot vessel costs	Fuel and maintenance – 22 weeks/ year minimum	\$130K	
Fuel for RHIB's	25 gallons/ hr @ \$100/hr cruising speed per boat	\$25K	
Legal and Support Costs	criminal, private and civil prosecutions		\$150K
Total estimated ongoing annual O&M costs		\$581K / year + facility costs	\$251K /year + facility costs

1. Administrative System Overhead Cost breakdown found in rationale document
2. Office Fit-up cost breakdown found in rationale document
3. Note that there is a one time cost to compensate for the initial deployment of staff to the program.

Annual Overtime Costs for the DFO Conservation & Protection Aquaculture Program - November 2009

Overtime costs (salary dollars)	Based on \$7K/ staff member 13-SCA, 5-RHQ	\$91K (salary dollars)	\$35K (salary dollars)
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Summary of Costs for the Pacific Region C&P Aquaculture Program (SCA +RHQ Support) – November 2009

Assets and One time Costs, excluding all Facility and Program Specific Costs

Area	Initial Costs
South Coast Area	\$4,253,000
Regional Support Area	\$ 380,000
Total Region C&P	\$4,633,000

Annual O&M Costs, excluding any Facility and Program Specific Costs

Area	Annual Costs
South Coast Area	\$581,000
Regional Support Area	\$251,000
Total Region C&P	\$832,000

Annual Salary Costs, excluding benefits (for discussion purposes only)

Area	Annual Costs
South Coast Area	\$ 876,121
Regional Support Area	\$ 588,998
Total Annual Salary	\$1,465,119

- Preliminary based on preliminary discussions as a basis to begin process.

Annual Overtime Costs

Area	Annual Costs
South Coast Area	\$91,000
Regional Support Area	\$ 35,000
Total OT C&P	\$126,000

Totals Including Operations in the SCA and RHQ support:

Total Annual Salary & OT costs, excluding benefits = \$1,465,119 + \$126,000 = **\$1,591,119**
Total Annual O&M Costs = **\$ 832,000**
Total Asset and One Time Costs,
Excluding Facility and Program Specific Costs = **\$4,633,000**

Comments on the Asset Acquisitions required to conduct an effective monitoring and enforcement program within the Aquaculture Program.

The following assets described in this document have been identified as essential for conducting a monitoring and enforcement program within the Departments mandate of managing the Aquaculture Industry:

Office and Warehouse and Residential Requirements

- There is currently no space available at any location to accommodate the staff numbers and equipment requirements for the delivery of this program. Therefore new space will have to be created to accommodate this new group.

- The locations, size, and designs of the facilities will be determined once the program logistics to be undertaken are decided. This document outlines possible facility locations to maximize program effectiveness. This will be done in consultation and cooperation with RPTS staff.
- To make the most effective use of the Department's resources, the new facilities should incorporate the needs of all sectors involved with the Aquaculture Program.
- The design of any facilities must incorporate the requirements necessary to house both the personnel and equipment needs of the program (i.e. secure storages, high overhead warehouse doors, etc). The costs related to our program needs may involve an additional program cost to the RPTS basic costs.
- Opportunities to merge this unit with new office designs in current locations may also be a consideration.
- There will not only be initial start-up costs to acquire these facilities but also annual costs to maintain both the facility and program assets.
- The Tofino location would require additional residential accommodations for staff to be factored into the program costs.

Administrative System Overhead

- This new program will be an increased burden on already overtaxed resources. In some cases, where a new office originates there is no overhead resources existing.
- Consideration must be given in each location to such items as a computer network, telephone system and hardware for each person, printer capabilities and needs, faxes, photo copiers plus general start up costs associated with original supply purchases.

9-Metre RHIB (Rigid Hulled Inflatable Boat)

- A platform required to transit to/ from farm sites for inspections, audits of operations and investigations.
- Must be able to transport 2 – 4 personnel at any time plus their associated gear.
- Capable of handling reasonable sea conditions at a reasonable speed.
- Many of the sites are in remote coastal areas which require a reasonable transiting vehicle to access them.
- Vessel should be versatile and capable of not only transiting personnel to/ from sites but also to perform a variety of inspection functions while at the sites (i.e. dive platform).

Vessels – 45 foot Program vessel

- There is a need for a variety of vessels to enable staff to properly monitor and enforce the regulatory regime that will be in place to ensure compliance.
- This larger vessel is required to conduct the more complex inspections, audits and investigations relating to the aquaculture industry activities.
- The vessel needs the capacity to accommodate a minimum of 4 persons for extended periods of time in remote coastal locations where farms are located.
- The more complex monitoring and compliance activities require the deployment of specialized equipment and activities. These compliance monitoring activities require a platform that has an open aft deck with a davit and winch for launching and operating this specialized equipment (i.e. ROV or VanVeen grab samplers).
- The program vessel should have a cruising speed of 20 knots and have a minimum range of 250 – 300 miles. This will ensure a reasonable time to transit sites in the more remote coastal areas.
- The costs identified include all navigational equipment required to operate the vessel, a small RHIB and outboard to meet the marine safety requirements (may also be operational as well), and tools and equipment required to operate and service the vessel.
- A minor refit will be required after 5 years and a major refit after 10 years
- May require the operator to obtain a 60-ton Mariner's ticket.

Vehicles

- Vehicles are needed to perform a variety of functions for the program. Several vehicles will be required to be capable of towing a 9m RHIB, hauling specialized equipment and conducting patrols on beach tenures; etc while others will be needed strictly for transportation. Specific requirements for each vehicle will be determined to ensure this fleet will be as effective and efficient as possible.
- All of the vehicles will be outfitted with the standard C&P emergency equipment package and be fully functional to perform the enforcement activities of C&P Fishery Officers.
- There are currently no vehicles within the existing C&P fleet that would be available to the new program on a permanent basis.
- The number of vehicles deployed will follow the standard C&P allotment of vehicles assigned to each office depending on the staffing compliment assigned there.

ROV (Remote Operated Vehicle)

- The underwater unit is a video camera that can be deployed down to depths in excess of 300 feet depending on the model and the amount of cable (umbilical cord) you deploy.
- The accessory pieces (tracking equipment, sonar and pre-survey side sonar) are required to accurately track the device and monitor the devices activities under the surface and to ensure that it does not become entangled with lines, debris and other items while being deployed underwater at the farm sites.
- It provides a 2 dimensional picture of the site.
- This device is imperative when inspections in excess of 100 feet are required. There are limitations to the depths and time underwater for a dive team so this unit allows for greater depths and durations when required.
- Multiple site visits are possible on any given day because the inspections can be done off-shore without physically being on the site.

Initial Outfitting of C&P Officers

- The field and staff Officers are expected to be trained as Fishery Officers and as such are deployable to other locations and duties as required.
- All field staff will be outfitted with the standard equipment that all other general duty Fishery Officers would receive.
- The gear will include all force continuum gear, radios, outer wear, cameras, binoculars, etc.

Office Fit-up Equipment for each Staff Member

- Standard office equipment is not forthcoming in the RPTS office configurations. C&P will be responsible for the acquisition costs associated with work stations, computers, chairs, book shelves, secure lockers, and cabinets to hold classified documents for each person.

Specialized Equipment

- Following the new Intel model enforcement program models currently being developed within C&P, this equipment will be necessary for the staff to collect and analyse information related to this fishery to help C&P better respond to problems, occurrences, industry and public enquiries as well as help the Department promote the successes of the industry.

Miscellaneous Office Equipment

- Items such as document scanners, freezers, fridges, etc are necessary for each field office site for use by staff collectively at the facility location.

Dive Gear

- A dive team would play an integral part of the inspection, audit and investigation functions of the compliance and enforcement program that C&P would be expected to carry out.
- The number of divers being requested for inclusion in this part of the program is should ensure that the Department would have a reasonable expectation of having a team available to conduct

either proactive or reactive inspections within a reasonable amount of time. Leave, training, performing duties as other priority activities are some of the conflicting issues this program will encounter when attempting to administer this function with fewer divers.

- Health and Safety labour and safety protocol dictate each dive must have a minimum of 2 divers in the water, with 1 fully suited diver ready to go and a boat tender.
- A dive team is capable of making more comprehensive observations in 3D and taking physical measurements or evidence where necessary.
- On an annual basis there are increased costs (time and /or expenses) associated with yearly medicals, first aid certification and a minor equipment maintenance.

Worksheets

Annual Administrative System Overhead Costs (1)

Item	SCA 13 staff	Regional Support 5 staff
Computer costs @\$1500/ person + 1 ruggedized laptop for each vessel (3) @\$1950	\$25,500	\$ 7,500
Telephone system, min \$30/person/line/ month, plus fax and 2 way radio lines 4-SCA, 2-RHQ	\$ 6,500	\$ 3000
Paper, pens, supplies, etc @\$1K/person	\$13,000	\$ 5,000
Photocopier @5K/office	\$10,000	\$ 5,000
Fax (secure)@ \$1K/ office	\$ 2,000	\$ 1,000
Security @ \$7K for new office, \$3K for existing office, may need extra for secure storage areas, card access, building intrusion	\$ 6,000	\$ 3,000
Miscellaneous @\$2K/ office	\$4,000	\$ 2,000
Total Annual Estimated Costs	\$67,000	\$26,500

Asset Costs for Office Equipment Fit –up (2)

Item	SCA-13 staff	Regional –5 staff
Work stations @\$4.5K per station	\$58,500	\$22,500
Chair @\$1K per station	\$ 1,300	\$ 5,000
Furniture – boardroom, interrogation rooms, lunchrooms, etc	\$10,000	
Secure file cabinets, book shelves @\$2.5K per station	\$32,500	\$12,500
Total Office Fit-Up Costs	\$102,300	\$40,000

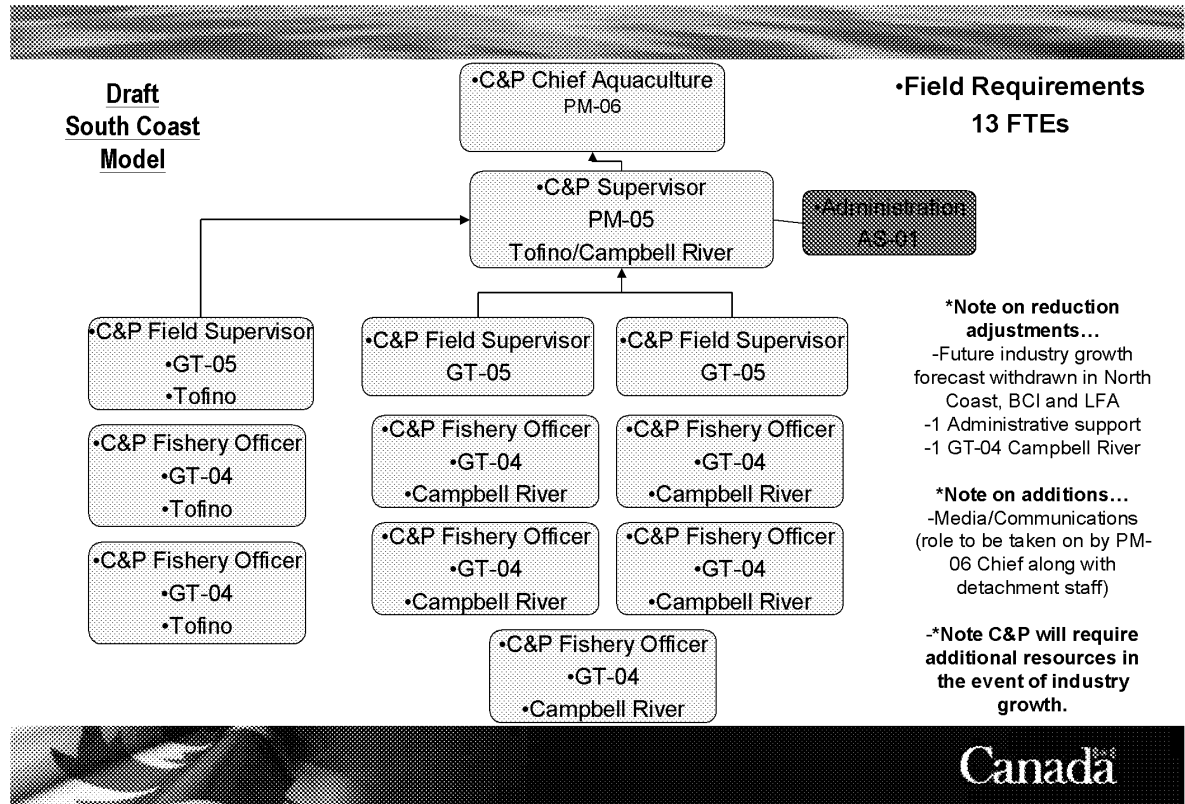
Appendix "A"

Field Detachment Organization Charts



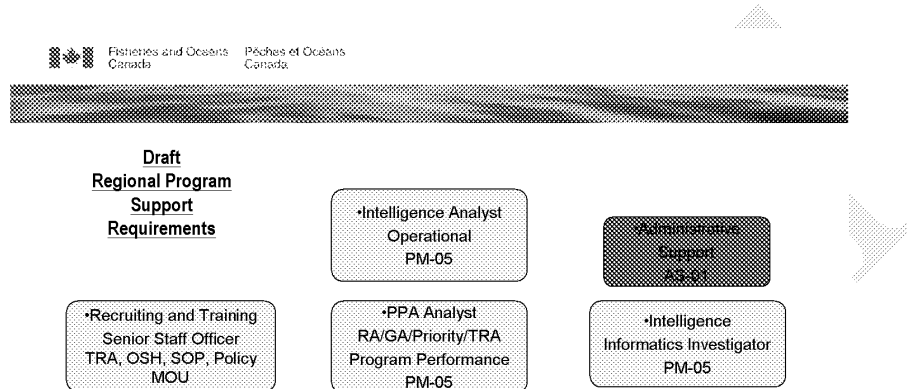
Fisheries and Oceans
Canada

Pêches et Océans
Canada



Appendix "B"

Regional Support Organization Charts



***Note on reduction adjustments...**

- 2 Analysts (1 I&I, 1 PPA) (if analysts from AMD take on a support role to C&P)
- 1 Media/Communications (role to be taken on by PM-06 Chief along with detachment staff)
- DOJ support (if DOJ is able to support the increased demands to C&P)
- HR (if existing HR can support increased demands on C&P)

**•Regional Support Requirements
5 FTEs**



Appendix “C”

Intelligence Led Policing and Inspection Goals

INTELLIGENCE LED POLICING AND MAJOR CASE MANAGEMENT

Intelligence Led Policing

- Intelligence driven = evidence driven decision making
- Intelligence capacity
 - Internal: Officers/Employees, External: Public and Partners
 - Strategic intelligence analysis to focus on “big picture”
 - Tactical analysis– to provide intelligence product to investigations
 - Share product within and with other partners/agencies

The C&P focus to an intelligence led policing philosophy incorporates a well formed and supported Intelligence Model that will provide guidance to addressing the aquaculture venue. It will enhance C&P’s ability to investigate and prosecute companies and individuals who would otherwise be effectively immune. Major investigations permit the establishment of a chain of individuals and/or corporations involved in the commission of offences.

General and specific deterrents are best served by comprehensive investigations and prosecutions.

The submission incorporates intelligence led policing and will provide enhanced accountability. Intelligence Led Policing is a structured process which involves gathering and analyzing intelligence, identifying and targeting problems and evaluating results. It is based on the philosophy that the principal task of compliance management is to prevent and detect enforcement concerns rather than simply react to it.

Intelligence applies to both tactical and strategic levels, and when used properly, can help not only identify patterns and linkages (the who, what, where, when and how of enforcement concerns) but also assist in solving investigations or predicting and preventing future enforcement concerns. Utilizing intelligence ensures that we can assist in mobilizing resources towards an effective response, that response may include a vast array of options particularly when the main objective is to disrupt and suppress illegal activity vs. strictly enforcing the applicable laws. This objective allows managers to strategically apply the best options for an effective compliance management decision. Intelligence and SWOT (strength, weakness, opportunities, threats assessments) will assist in pointing the direction.

Intelligence led compliance management will generally involve information collection as part of the organizational culture—led by the chiefs, supervisors, and managers who encourage line officers and investigators to regularly collect and forward intelligence. Analysis is indispensable to tactical and strategic planning—record management systems are robust, analysts are well-trained and equipped, actionable intelligence products are regularly produced to inform both tactical and strategic decisions.

Enforcement tactics are focused, prioritized and prevention-oriented; operations are mounted against repeat or violent offenders; serious organized (habitat destruction, production audits, sales etc.) groups, tactics are identified and poor practices dismantled. Privacy is preserved and protected by practices and policies that are consistent with the ideals of a democratic society.

Partnerships

The intelligence process contributes significantly to partnership activity. Most law enforcement agencies are under the same obligation to provide intelligence based policing and will enable those that handle intelligence to 'speak the same language'. This provides a rigorous and defensible basis for managing the challenges that the Privacy Act presents for intelligence sharing. The presence of our partners at strategic and tactical meetings will ensure better informed decision-making and a more accurate gauge of public opinion at local and Regional levels.

Partners should be encouraged to provide information to the beginning of the process and to accept products after research and analysis (these may have to be sanitized), in order that they can be better informed in relation to the strategic issues, or assist in tactical resolutions.

Additionally, it must be recognized that much of the information and intelligence produced at a tactical level is of a restricted or confidential nature, and often relates to targeting individual offenders and potential offenders.

Impact on management processes

The Tasking and Coordinating Process: The intelligence process helps managers to understand compliance management problems because they will have access to high quality intelligence and are obliged to formulate their strategy and tactics using it. Decisions will be documented and reviewed on a formal basis within the tasking and Coordination Structure thus ensuring accountability and transparency. Performance analysis is incorporated into the intelligence products and this too helps to secure efficiency when determining enforcement activity.

The Tasking and Coordinating Process takes place strategically and tactically with information and intelligence flowing between law enforcement agencies.

System Products: The I.T. and manual systems that enable intelligence-led policing to work and ensure the security of data.

Sources: The service identifies a number of sources (e.g. victims, witnesses, offenders, informants). It is essential that information and intelligence is gathered from ALL sources in line with the priorities and the Intelligence Requirement, and that is processed through the intelligence systems.

People: The selection, recruitment and retention of the right people in the right roles. It is essential that certain roles are fulfilled in sufficient numbers to provide a high level of resilience.

Intelligence Products

Intelligence products are a way of presenting analyzed information to managers and will take the form of reports about specific problems and issues. Below are four different products that should be compiled in the same way by each and every enforcement agency.

The first report is called a Strategic Assessment and it is put together by specialists who will aim to give an overview of actual and emerging trends for compliance management on a long-term basis. This is the most innovative of the products because it forces senior managers to determine their priorities by thinking strategically. The other three products provide the intelligence picture at a more tactical level, offering detailed analysis of problems and people and making suggestions about the best course of action. The benefit of having such specific products is that they are uniform and can be shared or added together to recognize mutual problems and issues without having to account for different methods, practices or techniques.

Four key 'Intelligence Products' are produced to drive compliance management through the Tasking and Coordinating process these products are:

I. The Strategic Assessment

This document is produced by the intelligence function with the assistance of various specialists, and provides the big picture of what is happening at a regional, national or global level.

Examining seasonal trends, information about what has happened since the last Strategic or Tactical Assessment and known or predicted future events, it attempts to establish what is likely to happen in that area in the six months following the Assessments. In highlighting the possible strategic priorities it makes

recommendations in relation to priorities for intelligence, prevention and enforcement.

What are they:	What are they for:
<ul style="list-style-type: none"> ▪ Advice to management incorporating: <ul style="list-style-type: none"> – Impact of government demands – Activity impact assessment – Enforcement concerns trends and interpretations – Market states and interpretations – Demographic / enforcement concerns predictions – Organised criminality threat assessments 	<ul style="list-style-type: none"> ▪ Use by management in strategic tasking and coordination to set the control strategy <ul style="list-style-type: none"> – Making resourcing decisions – Setting the local intelligence requirement – Setting preventative priorities – Setting enforcement priorities – Supporting organisational business planning – Setting the local partnership strategy

II. Tactical Assessment

This document is produced by the intelligence function with the assistance of various specialists, and provides an overview of what has happened with respect to specific targets or groups and attempts to establish what may happen in the next period. It provides recommendations as to tactical activity in relation to intelligence, prevention and compliance management

What are they:	What are they for:
<p>Advice to management, incorporating:</p> <ul style="list-style-type: none"> – Activity impact assessment of current operations – Emerging enforcement concerns trends – Emerging hotspot problems – Other new needs/problems and resource requirements 	<p>Use by management in tactical tasking and coordination:</p> <ul style="list-style-type: none"> – Reviewing resourcing decisions – Reviewing intelligence plans and activity – Reviewing preventative plans and activity – Reviewing enforcement plans and activity – Staying on course – how are we doing on targeting,

	enforcement concerns series investigation, hot spots and preventative measures
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III. The Problem Profile

Produced by the intelligence function with the assistance of various specialists, the Problem Profile identifies the scale of a problem in a Region or area and identifies potential suspects and recommends tactics under Intelligence, Prevention & Enforcement.

What are they:	What are they for:
Intelligence profiles for operations mgt <ul style="list-style-type: none"> – Enforcement concerns series revealing <ul style="list-style-type: none"> ▪ Confirmed series MO's ▪ Links to suspects ▪ Prevention opportunities ▪ Flying start for investigators – Hotspots revealing <ul style="list-style-type: none"> ▪ Detail of the problems ▪ Identified trouble makers ▪ Opportunities for prevention and control ▪ Partnership opportunities 	<ul style="list-style-type: none"> ▪ Support for enforcement concerns series investigation & targeting ▪ Direction for hotspot management plans ▪ Planning prevention / reduction initiatives

IV. The Target Profile

Produced by the intelligence function with the assistance of various specialists, the 'Target Profile' profiles suspects/offenders, identifies weaknesses in their criminal activities and recommends tactical options.

What are they:	What are they for:
Intelligence profiles for operations management: <ul style="list-style-type: none"> – Target profiles – MO's, latest intelligence - habits, associates etc. plus proposal for action – Network analysis plus proposal for action – Permanent risk profiles 	Support of target investigations, disruption & network demolition: <ul style="list-style-type: none"> – Selection of targets – Guiding investigation – Shaping intelligence collection plans – Officer safety and security

INTELLIGENCE LED INSPECTION MODEL GOALS

C&P would incorporate aquaculture into the intelligence led inspections initiative a model designed to address organized and serious enforcement concerns through inspections an auditing will include the following goals.

Goal 1: TO PROVIDE EFFECTIVE COLLECTION, ANALYSIS AND DISSEMINATION OF INTELLIGENCE OBTAINED THROUGH INSPECTIONS AND AUDITING.

This goal will be achieved through the following strategies and initiatives:

- Ensure C&P has the appropriate human resource and computer data base capabilities to communicate directly with each identified database necessary to achieve this goal. This would include the future proposed NII project as well as government and commercial data base information technologies.
- Ensure appropriate electronic and hardcopy pathways exist for the sharing, collection, analysis and dissemination of intelligence with DFO Liaison Officers, investigators, appropriate units such as MSOC and or external partners.
- Research effectiveness of current agency and inter-agency reporting procedures and policies to facilitate member agencies in their contributions to the needs of all enforcement services nationally.
- Manage all records within the Conservation and Protection sector, addressing access to information, disclosure, storage, retrieval and sharing of information issues in accordance with the Federal Privacy Act.
- Encourage the use of the I2 as the national intelligence database for the collection, analysis, and dissemination of criminal intelligence.
- Incorporate the case file management system X-Fire on a national and regional level. Incorporate Adobe 8 Professional in storing electronic documents obtained during inspections and investigations.

Our performance in meeting this goal will be measured by:

- Conducting an annual officer satisfaction survey.
- Reviews of all Post Operational Analysis reports.
- Evaluating input from member agencies for quality and quantity.
- Conducting retention of information reviews in accordance with the Federal Access to Information and Privacy Acts.

Goal 2: TO DEVELOP INTELLIGENCE-BASED ANALYTICAL PRODUCTS AND PARTICIPATE IN THE PREPARATION OF THREAT ASSESSMENTS ON ORGANIZED ENFORCEMENT CONCERNS FOR THE BENEFIT OF SENIOR MANAGERS AND VARIOUS LEVELS OF GOVERNMENT.

This goal will be achieved through the following strategies and initiatives:

- Support the analytical function of all DFO and other Joint Forces Operations.
- Use of a Strategic approach to the development of best practice guidelines.
- The participation of DFO analysts in the development of bi-annual Provincial Threat Assessments using the Sleipnir Model (RCMP assessment tool).

Our performance in meeting this objective will be measured by:

- Delivery of annual quality strategic overviews evaluating the current and potential impact of criminal organizations and serious enforcement concerns on the resources in B.C.
- Research and evaluate existing enforcement efforts.
- Research and identification of new or innovative approaches for potential application in DFO.
- Delivery of two (spring and fall) classified Threat Assessments on the highest tabled priorities per year to the Senior Executive Committee.
- Support of recommendations arising from DFO developed strategic reports by the Senior Executive Committee.

Goal 3: PARTICIPATE IN MULTI-AGENCY AND MULTI-DISCIPLINARY JOINT FORCES OPERATIONAL ENFORCEMENT STRATEGIES FOR TARGETING ORGANIZED AND SERIOUS ENFORCEMENT CONCERNS WITHIN THE FISHING INDUSTRY.

This goal will be achieved through the following strategies and initiatives:

- Review and recommend approval of Joint Forces Operational plans by DFO Executive Committee members, inclusive of other agencies and the Liaison Officer for the RCMP ("E" Division) or their delegates.
- Ensure C&P provide sufficient human resources within operational plans and establish cost-sharing and top-up funding formulas for participating areas and agencies.
- Provide financial support for the purchase of specialized investigative equipment required for Joint Forces Operations. This equipment will remain part of a C&P inventory and be available to any C&P member or participating agency for criminal investigations.
- Ensure the inclusion of timely and competent legal advice through consultations with Prosecutorial Services provided by Federal Attorneys General.

- Promote the inclusion of a proceeds of enforcement concerns/forensic accounting component in all organized criminal and/or Joint Forces Operations where there is a likelihood of seizure of the illegal proceeds of enforcement concerns.

Our performance in meeting this objective will be measured by:

- Monitoring all operations by reviewing Post Operational Analysis reports.
- Enforcement actions taken against key members of criminal organizations, organized enforcement concerns groups and serious criminal offenders.
- Seizing assets from members of criminal organizations and organized enforcement concerns groups.
- Participating in post-investigation operational debriefings.

Goal 4: TO PROVIDE PROFESSIONAL DEVELOPMENT FOR ENFORCEMENT PERSONNEL IN ORDER TO COMPREHEND AND RESPOND TO THE CRIMINAL ACTIVITIES OF ORGANIZED ENFORCEMENT CONCERNS GROUPS AND SERIOUS CRIMINAL OFFENCES.

This goal will be achieved through the following strategies and initiatives:

- Research the skills, knowledge and abilities required by investigators to successfully undertake enforcement initiatives targeting organized enforcement concerns groups and serious criminal offenders.
- Liaise with existing municipal, provincial, national and foreign institutions offering relevant training courses to investigators of organized and serious criminals.
- Provide funding for enforcement officers to attend such courses or exchange programs as are required to succeed in the pursuit of organized criminal initiatives.
- Develop and host training programs for those issues not already addressed by existing institutions.
- Establish a syllabus inclusive of relevant courses to ensure that joint forces investigative teams possess the skills, knowledge, and abilities to pursue substantive offences, intelligence processing, and proceeds of enforcement concerns opportunities.
- Ongoing development and implementation of National standards for training of organized and serious enforcement concerns investigators.
- Establish lists of individuals with specialized skills and expertise to provide training and maintain the required level of expertise.

Our performance in meeting this objective will be measured by:

- Developing standards and syllabus for skill development consistent with the National Intelligence Model.

- Facilitating the delivery of necessary training.
- Conducting a province-wide training needs assessment survey to ensure relevant training requirements.
- Incorporation of results from the annual client satisfaction survey.

Goal 5: TO PROVIDE ENHANCED USE OF TECHNOLOGY TO COMBAT THE EVOLUTION OF TECHNOLOGICALLY BASED ORGANIZED ENFORCEMENT CONCERNS IN THE FISHING INDUSTRY.

This goal will be achieved through the following strategies and initiatives:

- Provide resources and expertise to conduct pro-active research into the use of computer technologies by organized enforcement concerns groups.
- Research and identify the extent of technologically based organized enforcement concerns in the fishing and related industries.
- Set up and maintain a secure Internet computer for research.

Our performance in meeting this objective will be measured by:

- Submission of analytical products on the nature and extent of technologically based organized enforcement concerns to the Executive Committee.
- Active use of the internet computer by investigators into researching various web sites without leaving a large DFO footprint.

Goal 6: TO ESTABLISH AND ENHANCE PARTNERSHIPS WITH A MULTITUDE OF STAKEHOLDERS TO REDUCE AND CONTROL ORGANIZED ENFORCEMENT CONCERNS AND TO BE ACCOUNTABLE TO PARTNERS.

This goal will be achieved through the following strategies and initiatives:

- Evaluate existing organized enforcement concerns to ensure focus and ability is toward disruption and suppression of organized enforcement concerns and not just its symptoms.
- Conduct research and environmental scans to determine best practices for enforcement initiatives.
- Facilitate the detection of enforcement concerns opportunities, the evaluation of preventative measures, and the reproduction of good practices.
- Foster new opportunities to include other community stakeholders in the resolution of organized enforcement concerns issues in the fishing industry.
- Participate with all levels of government to establish new protocols to resolve organized enforcement concerns issues in DFO.
- Enhancing current and developing new partnerships provincially and nationally.

Our performance in meeting this objective will be measured by:

- Identifying the real costs and resources associated to the implementation of Joint Forces Operations.
- Use of best practices in future Joint Forces Operations.
- Acceptance of recommendations by the Senior Executive Committee.
- Submission of bi-annual reports to the Senior Executive and Director of Enforcement Ottawa.
- Submission of strategic analytical threat assessments and projects.
- Maintaining financial records suitable for fiscal audits by the Governor General, as required.

Goal 7: TO DEVELOP A COMMUNICATIONS STRATEGY THAT ASSISTS IN DELIVERING AN ACCURATE MESSAGE OF THE SCOPE AND IMPACT OF ORGANIZED ENFORCEMENT CONCERNS

This goal will be achieved through the following strategies and initiatives:

- Presentations to private and public sector officials outlining the issues, costs, and commitment associated to the suppression and prevention of organized enforcement concerns.
- The development of a media strategy that incorporates public education on the impact of organized enforcement concerns, raises awareness, and promotes successes while avoiding the disproportionate increase in fear.

Our performance in meeting this objective will be measured by:

- Increased or enhanced participation by other agencies, including first-line defenders

RECOMENDATION

The submission is supported in order for C&P to effectively undertake its new role with aquaculture. The premise is that this model will be determined to have merit and will therefore warrant the requested resources for effective program delivery regarding Aquaculture.

SUMMARY

Aquaculture is a time sensitive program requiring immediate response with high public

expectations with many historical and future challenges. The resources sought in this submission will provide C&P with the ability to meet the aquaculture challenges in a holistic, sustainable and timely fashion.

The C&P Aquaculture Team submission provides resourcing that will enable C&P to meet many challenges immediately and in the future building public confidence, supporting Canada economic opportunities while conserving and protecting in a responsible fashion.

The incorporation of the Aquaculture Regional Support Team provides C&P with an intelligence led approach which will be required to meet the challenges C&P will face on the aquaculture profile by providing:

- strategic gathering of information
- gap analysis
- ongoing assessment and analysis of information
- intelligence products
- the foundation of major case management
- guidance for strategic assignment and integration of C&P resources

This submission provide the strength, stability and architecture required for C&P to evolve and enable a more consistent approach, a higher probability of conviction, increase public confidence, supporting economic opportunity and a greater deterrent helping us to conserve and Protect Canada's Aquatic Resource and Aquaculture Industry.

WORKS CITED

Documents and articles that helped the strategic direction of this business plan are as follows:

- *The National Intelligence Model (best practices model)*
- *The Road Ahead Results*
- *DFO National Compliance Framework*
- *The National Major Case Management / Intelligence Working Group*
- *The Department of Primary Industries Fisheries Victoria Australia*
- *Final Public Service Renewal Action Plan 2008-2009*
- *Criminal Intelligence Services Alberta*
- *C&P Maritimes Major Case Management – Tony Clark*
- *Pacific C&P Intelligence Led Policing Business Case*