Riparian Areas Regulation ANNUAL REPORT ON IMPLEMENTATION

June 1, 2015



Ministry of Forests, Lands and Natural Resource Operations

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Introduction

The Riparian Areas Regulation (RAR) was enacted under the authority of the Fish Protection Act on July 27, 2004 to become effective March 31, 2006. The main purpose of the RAR was to establish directives to local government to define and protect riparian areas from development so that the protected areas can provide the natural features, functions and conditions that support fish life processes.

The RAR has been in effect for nine years. During this time the ministry has collected data on what is working well with respect to RAR implementation, and what can be improved. The RAR has also been subject to recent scrutiny from external sources, including the Ombudsperson of BC's office, the Cohen Commission (Federal Inquiry into the decline of the Fraser River Sockeye), and the University of Victoria Environmental Law Centre. A common theme that emerged in these reviews is whether the RAR's use of the professional reliance model is effective. The RAR uses a singular approach by implementing a results-based regulation through local government bylaws in order to protect riparian areas during development on private land. Implementing a model with very few counterparts presents learning opportunities and challenges. For this reason, the ministry appreciates the value of these varied and considered recommendations in complementing and supporting the data collected through monitoring. Together, this information helps improve internal processes and understand changes that need to be made to ensure the effective delivery of RAR.

In March 2014, the Office of the Ombudsperson of BC issued Public Report No. 50 titled "Striking a Balance: The Challenges of Using a Professional Reliance Model in Environmental Protection- British Columbia's Riparian Areas Regulation". This report presented the results of a systemic investigation into the RAR and reported out on topics including local government compliance, professional reliance, monitoring and compliance, public information and access, and concerns and complaints. "Striking a Balance" makes 21 findings and 25

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recommendations that are aimed at improving the administration of RAR. Some of the activities described in this report reflect actions taken by the ministry in response to the Ombudsperson's recommendations. Given the scope of many of the Ombudsperson's recommendations, these will be implemented more fully in the coming years. The Province has allocated additional resources to meet the Ombudsperson's recommendations and is confident that this investment will significantly improve the RAR program.

This annual report presents the Ministry of Forests, Lands and Natural Resource Operations' results on activities for the calendar year 2014. Specifically, this report describes the status of implementation, a summary of monitoring activities, an update on training and meetings, and recommendations for revisions. In addition to providing an overall summary assessment of RAR implementation for 2014, it highlights key activities, outputs, and outcomes that illustrate the progress achieved. Annual reports on RAR implementation are based on a calendar year, rather than fiscal year, to better align the report with the RAR compliance monitoring program..

Status of Implementation

Highlights of the work the ministry completed this year include;

- Responding to the Ombudsperson's report on RAR and ensuring staff and other resources were in place to begin implementation of the 25 recommendations.
- Initiating a project to assess local government compliance with the RAR and committing to make the results of that project publicly available. The ministry has been reviewing and analyzing bylaws from over 100 local governments and will be presenting the results of the review in summer 2015.

- Supporting a compliance monitoring project to ensure that assessments submitted in 2013 were evaluated in accordance with the RAR monitoring framework. Highlights of the results are presented later in this report.
- Reviewing all reports submitted to the RAR notification system for a minimum of 2 years. At the end of two years (December 2016) results will be evaluated and a plan will be established based on the outcome.
- Contributing funds and staff support to a joint guidance document for practitioners who carry out RAR assessments. This work is being led by the College of Applied Biology (CAB), the Association of Professional Engineers and Geoscientists (APEGBC), the BC Institute of Agrologists (BCIA), and the Association of Professional Foresters (ABCFP) and is expected to be released in late 2015.
- Renewing the License Agreement with Vancouver Island University (VIU) to offer the RAR training course for Qualified Environmental Professionals (QEPs) for another five years.
- Participating in a panel presentation given to the Association of Professional Biologists. Topics included RAR, professional reliance, and changes to both the provincial Water Act (Water Sustainability Act) and the federal Fisheries Act.
- Embarking on a project to review and revise the RAR website to make it more relevant, informative, and easier to navigate. These improvements will be ongoing over 2015.

There has been significant progress on the Ombudspersons recommendations since 2014. This progress is expected to continue into 2015 with the investment of additional resources.

Local Government Implementation

The RAR applies to 15 Regional Districts and the incorporated municipalities within them, for a total of 110 local governments. Ministry staff have been working with individual local governments to encourage and assist

implementation of RAR, however some local governments continue to face challenges in enacting effective RAR bylaws. In 2015, the ministry will present the results of a comprehensive review of all local government RAR related bylaws. As a follow-up activity, we are working with local governments to identify which tools and procedures have been most successful in effective RAR implementation. We will present this information as part of an updated guidebook to further support local government implementation of the RAR.

Internal Meetings

Several internal meetings have been held this year with the aim of improving the progress of RAR implementation within FLNR as well as maintaining communication between FLNR, Fisheries and Oceans Canada (DFO) and the Union of BC Municipalities (UBCM). In addition to conference calls and meetings held on specific subjects and issues within FLNR, the following have taken place:

- The RAR Coordination Committee (RARCC) meets monthly via conference call to discuss implementation issues and solve problems that staff have encountered with respect to RAR. Currently the RARCC consists solely of members from FLNR.
- A two day workshop was held between DFO and provincial ministries who have fish protection interests/authorities. This workshop helped increase the Province's understanding of the new provisions of the Fisheries Act and how "serious harm" will be applied. Through a series of hypothetical riparian development scenarios, we aimed to better understand how DFO would determine a permanent alteration to fish habitat and what the threshold for serious harm would be.
- A face-to-face meeting of the RAR Coordination Committee was held for two days in September 2014. During this meeting a workplan was created

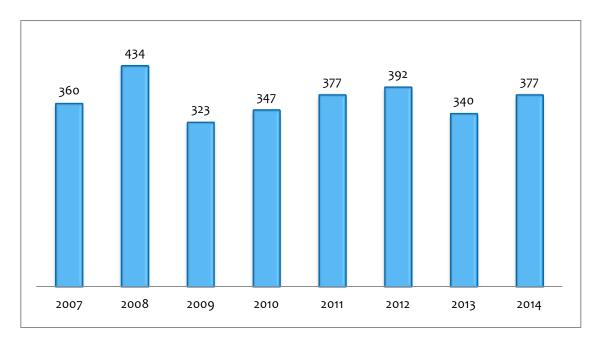
to set out how the ministry could best implement the Ombudsperson's recommendations.

Number of Notifications

NUMBER OF REPORTS IN NOTIFICATION SYSTEM

In 2014, 377 reports were submitted through the online RAR notification system (Figure 1). This value is consistent with the annual average since 2007 (average= 368).

FIGURE 1. Number of reports submitted between 2010 and 2014 (Average = 368).



DISTRIBUTION OF REPORTS

FLNR REGIONAL DISTRIBUTION

Of the 377 reports submitted, 123 (33%) were from West Coast Region, 99 (26%) were from the South Coast Region, 153 were from the Thompson-

Okanagan Region, and 2 (0%) were from the Kootenay¹ (Figure 2). These numbers are fairly representative of the development pressure within these regions, with some exceptions. Although the average number of reports remains similar from year to year, there has been a shift in distribution by Region. Since RAR was brought into force, the Thompson-Okanagan region has seen an increase proportionally in the number of reports submitted, while West Coast has had a proportional reduction. South Coast has remained relatively constant.

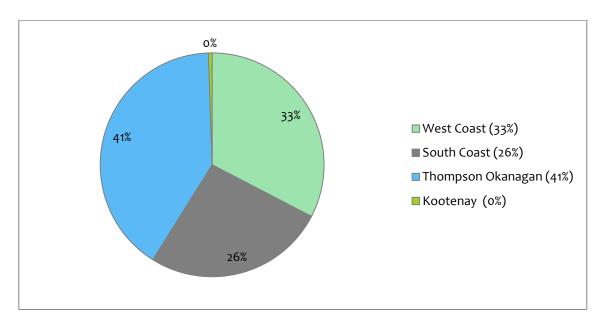


FIGURE 1. Proportional number of reports submitted for FLNR regions, 2014

¹ The RAR applies to only two municipalities within one regional district in the Kootenay region.

LOCAL GOVERNMENT DISTRIBUTION

Some local governments have seen a considerable increase in number of reports than other comparable (in terms of population, or location on a major watercourse) local governments. The high number of reports received in the Columbia Shuswap Regional District (CSRD) is consistent with other regional districts or municipalities with large lakes in thier jurisdictions. High numbers in other municipalities can be attributed to either a high level of development in that area, a large number of watercourses, and/or diligence by the local government in ensuring that they do not approve or allow development without the benefit of a RAR report.

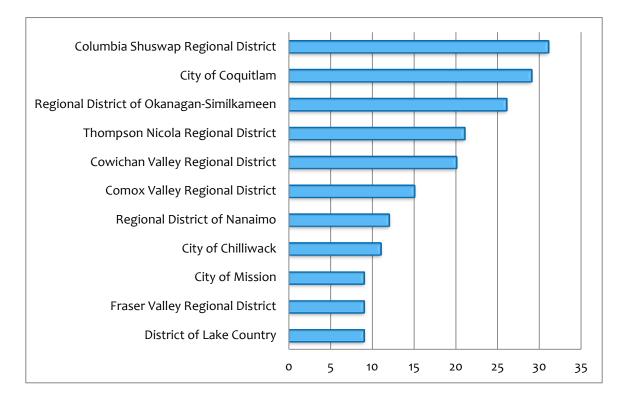


FIGURE 3. Local governments with total highest number of RAR submissions.

DISTRIBUTION BY PRIMARY QEP

The majority of primary QEPs that submit RAR assessments are registered professional biologists. This is expected as the main skill sets required to

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perform RAR assessments (e.g. an understanding of fish habitat requirements, riparian and stream ecololgy, and biogeoclimatic classification) are typically those held by biologists. However, some technologists, agrologists, hydrologists and foresters also possess the necessary skills required to perform the tasks associated with a primary RAR assessment. Typically, engineers and geoscientists act as secondary QEPs and lend their expertise to making determinations of mitigative measures. These measures typically include advice on how to protect the SPEA from slope stability concerns, as well as recommending stormwater and/or sediment and erosion control measures.

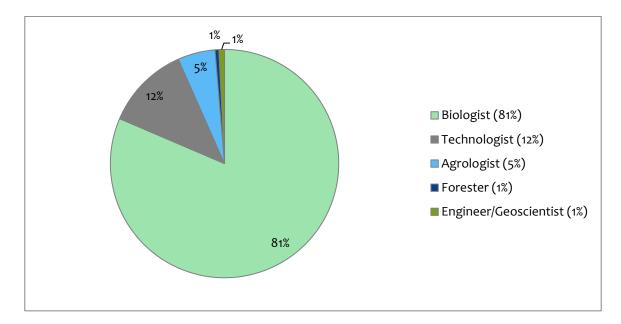


FIGURE 4. Professional designation of primary QEPs

The average primary QEP submits approximately 4 reports a year. In 2014, the 377 reports submitted in 2014 were done by 92 individual QEPs. These numbers are important because, as the Ombudsperson pointed out in "Striking a Balance", the pool of professionals who could potentially act as QEPs is approximately 40,

000 individuals. Figure 5 provides support for the finding that the number ofQEPs who submit RAR reports continues to be within a small range (less than1%) of all the qualified professionals belonging to applicable associations in BC.

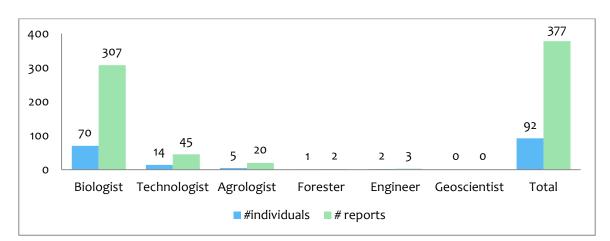


FIGURE 5. Number of individual QEPs submitting reports compared to total submitted

DISTRIBUTION BY DEVELOPMENT TYPE

Single family residential construction has consistently been the most common type of development seen in RAR reports, followed by subdivisions for single family lots. Figure 6- shows that single family residential construction continues to be the most common type of development for which RAR reports are generated. Figure 7- Shows that for all the RAR reports received, 93% are for residential properties, 4% are for commercial development, 1%- for industrial development and 2% for a combination of two or more types (e.g. a building for residential and commercial purposes).

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FIGURE 6. Types of development for all RAR reports submitted in 2014

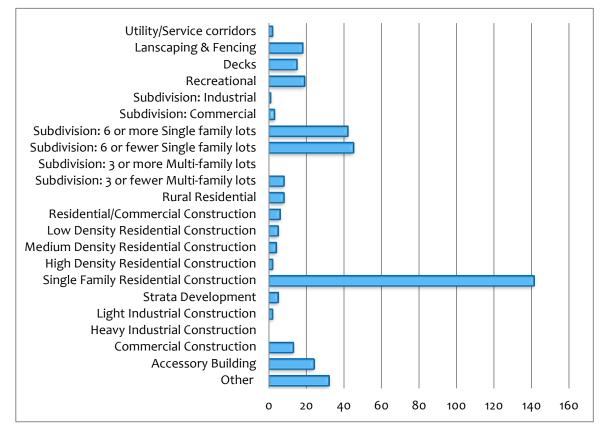
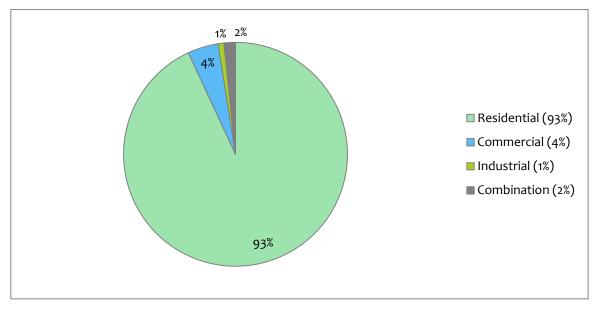


FIGURE 7. Development categories for all RAR reports submitted in 2014



Summary of Compliance Monitoring Results REPORT COMPLIANCE

Until mid- 2009, provincial staff reviewed every report submitted to the RAR notification system. As the ministry did not originally intend to review every report, but rather to audit a subset of reports, the ministry sought to ensure that QEPs understood the methodology early in its implementation. It was also necessary to collect this data to inform the RAR compliance monitoring plan.

In the "Striking a Balance" report, the Ombudsperson recommended that the ministry return to a 100% review of reports. In keeping with the spirit of this recommendation, the minister committed to reviewing all reports for a minimum of two years. At the end of two years' time, the ministry will assess compliance and develop a plan forward. Depending on the level of compliance achieved, staff will either continue to review all reports, or audit a sample of reports. The results of the two year compliance review, and the plan forward, will be available in the Annual Report for 2016.

In 2014, the ministry reviewed 116 reports (31% of all reports submitted), the majority of which were in the West Coast Region. In all cases where deviation from the RAR assessment methods was noted, ministry staff followed up directly with the QEP to request a revision to the assessment or a rationale for why the methods were not followed.

SITE COMPLIANCE

In keeping with the ministry's compliance monitoring framework, sites were selected for monitoring for which assessments were submitted in 2013². A total of 107 sites (from reports submitted in 2013) were monitored in 2014 to determine compliance with the RAR assessment methodology. Of the reports, 27 were

² In keeping with Ombudsperson's recommendations, reports that were submitted in earlier years and not audited will also be eligible for monitoring in subsequent years.

monitored in the Thompson-Okanagan Region, 42 in the South Coast Region, and 38 in the West Coast region. All of these sites were monitored for both QEP compliance with the assessment methodology and developer compliance with the assessment report. The results of the compliance assessment are presented in Appendix 1.

The compliance target originally set by the province and DFO was to achieve 90% compliance with 90% confidence. Since 2009, compliance rates have remained low. However, it is important to look at non-compliance in context and understand how it fits into the overall picture of RAR. For example, a site can be labelled non-compliant for various reasons: lack of SPEA marking, poor implementation of measures, incorrect calculations, and encroachment, among others. These non-compliant actions can lead to damage to the SPEA, but sometimes do not. Monitoring identified that fully one third of non-compliant sites provincially were for SPEAs not marked in the field, but no encroachment to the SPEA occurred. Similarly, where encroachment was identified, this varied from a few feet into the SPEA, or several meters or more. Regardless, no encroachment is acceptable under RAR. The RAR coordination committee will be evaluating the main reasons for non-compliance, focusing on those actions that lead to the greatest potential for damage to the SPEA. This will assist the ministry in prioritizing and targeting corrective actions

In 2015, the ministry will be implementing improvements to the RAR program based on both the Ombudsperson's recommendations, and ministry initiated projects. Ministry staff anticipate that these changes will be a positive step in improving compliance with RAR by local governments, QEPs and developers.

Effectiveness Monitoring

When the RAR was developed, DFO and the province committed to jointly monitor its effectiveness to ensure that the features that the regulation was designed to protect were being maintained. The SPEA designations made under the RAR are intended to preserve stream habitat conditions and biophysical processes similar to those occurring in intact riparian forests. Streamside protection and enhancement area widths are required under the RAR to maintain shade, litter fall, and large woody debris. These characteristics vary with several factors, including the site potential vegetation type, stream channel width, and stream channel type.

Extensive consultation with scientific staff in both agencies has consistently revealed the difficulties in empirically assessing the effectiveness of RAR. Experimental designs to assess whether the regulation results in significant changes in average habitat conditions are likely to be complex, and may not be possible. Reasons for this difficulty include:

- The variation of habitat characteristics through time in response to unpredictable events, such as floods,
- the impossibility of isolating the site-level effects of RAR from watershedscale effects,
- the inability to find replicate sites on which to make statistical inferences, and
- the variance in RAR setbacks among sites with different stream and riparian characteristics.

Despite these inherent limitations, the ministry will develop a policy framework outline for RAR effectiveness monitoring in keeping with the Ombudsperson's recommendations. This framework will establish a monitoring plan that will include what tools will be used to monitor, the frequency of monitoring and how the results of that monitoring will be used to inform future planning.

Summary of Annual Meeting with Associations representing QEPs

Ministry staff continue to meet with CAB staff as needed to discuss specific RAR issues. Various issues have been raised around standards of professional practice with respect to carrying out RAR assessments. Some of these concerns include the quality of reports submitted by QEPs, the specific roles and responsibilities of individual QEPs when working in teams, and QEP liability when providing their professional opinion.

PROFESSIONAL PRACTICE GUIDELINES

In response to some of the concerns identified above, CAB, APEGBC, ABCFP and BCIA are developing practice guidelines dealing with the standard of care to be provided when carrying out RAR assessments, including practice overlap between members of the various associations. The ministry has provided resources to this project and ministry staff have a role in reviewing the document to ensure compatibility with the RAR assessment methods. The guidelines are scheduled to be completed in 2015.

Training- Vancouver Island University

Under the RAR's Intergovernmental Cooperation Agreement (ICA), the Province committed to enter into a licensing agreement with Vancouver Island University (VIU) (formerly Malaspina College) to provide training on the RAR assessment methodology to QEPs on a cost recovery basis. This License Agreement has been renewed and VIU will continue to provide the course at locations throughout the Province. The Province administers this agreement and staff meet in person with the Course Coordinator at least once a year, and as needed via phone/email. Ministry staff stay in close contact with the Course Instructor and are currently working together to update and improve the course. The course is an excellent training opportunity for QEPs. Because of its success in providing a consistent and basic level of knowledge about the RAR assessment methodology, the Ombudsperson has recommended the ministry make the course mandatory for all QEPs who undertake RAR assessments. The ministry is proposing to include this item in a suite of upcoming regulatory amendments.

Three RAR courses were held in 2014 with a total of 30 students. Of those courses, 1 was in Campbell River, with 8 students; 1 was in Burnaby with 7 students; and 1 was in North Vancouver with 15 students. If the ministry is successful in making the course mandatory, an initial increase in the number of participants is expected.

Priorities for 2015

The RAR has been in effect for nine years, and over that time a significant amount of data has been collected that allows the ministry to propose key changes to the regulation. In addition to the data the ministry has collected through monitoring, the RAR has been examined by external bodies who have provided a series of recommendations to the Province to improve the program. Some of these changes are legislative in nature, but others centre on internal processes and actions the ministry can take.

REGULATORY CHANGE

In "Striking a Balance", the Ombudsperson made several recommendations that will only be possible to implement if the RAR itself is amended through an Order in Council. Other recommendations may require amendments to the governing legislation (*Fish Protection Act*/*Riparian Areas Protection Act*). Currently, staff are working to draft the first phase of regulatory amendments. Some of these amendments address the implementation challenges the ministry and local governments have faced since a 2011 court case (*Yanke v. Salmon Arm*(*City*)). Other changes proposed will address the challenges faced by the Province in

RAR implementation since the changes to the federal *Fisheries Act* were announced. Further amendments, if passed, will respond to the Ombudsperson's recommendations on the administration of RAR. Finally, the remainder of the changes may be proposed based on data from compliance monitoring and nine years of implementation.

CHANGES TO SUPPORTING MATERIALS

The ministry will be modifying supporting materials and guidelines in the coming years to improve the interpretation and delivery of RAR. Many of these revisions are being contemplated in conjunction with anticipated regulatory amendment. Other changes are in keeping with the Ombudsperson's recommendations, and yet others are being initiated by the ministry to improve communication with key stakeholders. Over the coming years the ministry plans to update and/or implement the following:

Implementation Guidebook: The ministry will update the information in the guidebook to make it more relevant to users. Rather than having one guidebook that provides advice to QEPs, local governments and proponents, information will be available on the provincial website by topic in a series of fact sheets and technical bulletins. The section on local government tools will be expanded to share the experience of some local governments. This is also where the ministry's interpretation of any regulatory changes will be provided.

RAR Pamphlet: The RAR pamphlet will be updated to reflect changes in process and improve readability.

Updates for QEPs: The ministry is working on a format to provide regular updates to QEPs on the provincial website to ensure QEPs always have consistent messaging across the province, and that their practice is up to date. It also gives

the ministry an opportunity to interact more frequently with QEPs to increase compliance levels.

REDEFINING PARTNER ROLES

Recent changes to the federal *Fisheries Act* have led to confusion among stakeholders with regards to RAR process. Although the Intergovernmental Cooperation Agreement (ICA) is still in effect, the delivery model outlined within it has changed due to *Yanke v.Salmon Arm* and changes to the *Fisheries Act*. Current DFO staffing and policy is different than the environment in which the ICA was created. Moving forward, all partners need a clear understanding of what each party's specific input and support will be. Responding to client concerns about RAR process requires DFO input and guidance to ensure that all parties are acting within administrative boundaries. Coming to agreement and defining these roles is a high priority for the ministry in 2015.

Appendix 1

 TABLE 1. Non-compliance summarized by category for all regions

	NON-COMPLIANCE TOTALS			
	THOMPSON- OKANAGAN REGION	SOUTH COAST REGION	WEST COAST REGION	TOTAL PROVINCIAL NON- COMPLIANCE
Regional Non- Compliance Totals	15/27 sites 56% non- compliance	25/41 sites 61% non- compliance	27/38 sites 71% non- compliance	67/107 sites 63% non- compliance
NON- COMPLIANCE CATEGORY	PROPORTION	OF NON-COMP	LIANCE BASED	ON CATEGORY
SPEA not marked in field, development encroached into SPEA	6 sites (out of 15 non-compliant sites) = 40%	5 sites (out of 25 non-compliant sites)= 20%	9 sites (out of 27 non-compliant sites) = 33%	20 sites (out of 67 non-compliant sites)= 30%
SPEA not marked in field, no encroachment into SPEA	2/15 sites= 13%	11/25 sites= 44%	9/27 sites= 33%	22/67= 33%
SPEA calculated incorrectly, no encroachment into SPEA	3/15 sites= 20%	2/25 sites= 8%	1/27 sites= 4%	6/67 sites= 9%
SPEA calculated incorrectly, development	N/A	1/25 sites= 4%	N/A	1/67= 1.5%

encroached				
SPEA marked incorrectly, development encroached into SPEA	N/A	N/A	1/27 sites= 4%	1/67 = 1.5%
SPEA marked correctly, development encroached into SPEA	2/15 sites= 13%	1/25 sites= 4%	N/A	3/67= 4.5%
Watercourses present on property not addressed in QEP report	N/A	1/25 sites= 4%	1/27 sites= 4%	2/67= 3%
SPEA marked incorrectly, no encroachment into SPEA	N/A	N/A	1/27 sites= 4%	1/67= 1.5%
Other	2/15 sites= 13%	4/25 sites= 16%	5/19 sites= 19%	11/67= 16%