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Public Comment  
LA INDICATOR BACTERIA TMDL  
Deadline: 6/20/11 by 5:00 p.m.



June 15, 2011

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th floor  
Sacramento, CA, 95814

**Re: Comments on the Proposed Approval of an Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load (TMDL) for Indicator Bacteria in the Los Angeles River Watershed.**

Dear Chairman Hoppin and State Board members,

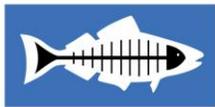
On behalf of Heal the Bay, we submit the following comments on the *Proposed Amendment to the Water Quality Control Plan for the Los Angeles Region to incorporate a Total Maximum Daily Load for Indicator Bacteria in the Los Angeles River* ("Draft TMDL"). A strong and effective LA River Bacteria TMDL is critical for our Region, as public health is currently at risk. Heal the Bay's Beach Report Card consistently notes failing grades for beaches at the terminus of the LA River.

We have several major concerns with the TMDL as adopted by the Regional Board. Our primary concern is the excessive amount of time allowed for meeting final dry weather and wet weather wasteload allocations. We also are concerned with the interim wasteload allocations and compliance monitoring. These concerns are addressed briefly below and in additional detail in comments submitted to the Los Angeles Regional Water Board on June 4, 2010 (see attached letter). We appreciate the opportunity to express our concerns.

**25 years is far too long for Dry and Wet Weather Compliance Deadlines**

The Draft TMDL's proposed *Implementation Schedule* requires "...within 25 years of the effective date of the TMDL, compliance with the allowable number of exceedances days at all locations during dry weather and wet weather is required." Twenty-five years is *far* too long for a compliance deadline and is inconsistent with similar TMDLs. Why should the Long Beach residents have to wait more than two decades for improved water quality at their beaches, especially during dry weather? According to the 2011 Annual Heal the Bay Beach Report Card (BRC), Long Beach's water quality continues to chronically suffer, with 73% of monitoring locations receiving C, D, or F grades during the dry weather AB411 period (see attached BRC Report page 35).

Additionally, wet and dry weather must have separate compliance deadlines, as dry weather standards will likely be met much faster than wet weather standards. Compliance deadlines for dry and wet weather should not exceed 10 years and 18 years, respectively. As a point of comparison, the AB411



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compliance period for Santa Monica Bay, Marina del Rey and Cabrillo Beach was approximately three years.

### **Interim Waste Load Allocations (WLAs) should reflect final compliance requirements**

The Draft TMDL includes interim WLAs for bacteria reduction that are based on microbial loading. Instead, WLAs should be based on concentration. Final WLAs are based on exceedance days and not enormous inaccurate loading estimates that are irrelevant for public health protection. There is no accurate way to quantify *E. coli* loading in MPN/day, as grab samples show only a “snapshot” of water quality from a particular storm drain or tributary on a particular day and time. The interim WLAs conditions should reflect final compliance requirements in order to acclimate dischargers to final requirements. The approach that has been used in many other TMDL’s is a percentage of the final target (exceedance days) or receiving water concentrations.

### **Compliance Monitoring Should be Strengthened**

Monitoring stations should be increased from one station per river segment to at least 3 stations per segment (upstream, downstream, and middle) to better improve the assessment of problem areas. Furthermore, outfall monitoring needs to be a requirement for discharger compliance assurance. A recent court ruling regarding MS4 dischargers’ storm drains (Natural Resources Defense Council (NRDC), Inc., *et al.* versus the County of Los Angeles *et al.*) deemed that “*standards-exceeding pollutants must have passed through a County or District outflow in order to constitute a discharge under the Clean Water Act and the Permit.*” This ruling supports the need for monitoring outfalls in addition to receiving waters, in order to determine compliance.

### **Conclusion**

In summary, we urge the State Board to consider the comments above, as they are critical in protecting public health. It is critical that compliance deadlines not exceed 10 years for dry weather and 18 years for wet weather; as residents of Long Beach should not have to wait 25 years for improved water quality. Furthermore, it is critical that interim limits be concentration or exceedance-based, as microbial loadings will not prepare dischargers for final water quality compliance requirements and are not protective of public health. Lastly, in order to ensure compliance, the monitoring program must be strengthened to include more locations in each reach and outfall monitoring to provide greater compliance assurance.

Thank you for the opportunity to comment. Please contact us if you have any questions at 310-451-1500.

Amanda Griesbach, MS  
Beach Water Quality Scientist

Mark Gold, D. Env.  
President

Kirsten James, MESM  
Water Quality Director



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June 4, 2010

Man Voong  
California Regional Water Quality Board  
Los Angeles Region  
320 West Fourth Street, Suite 200  
Los Angeles, CA 90013

**Re: Comments on the Proposed Amendment to the Water Quality Control Plan for the Los Angeles Region to incorporate Total Maximum Daily Load for Bacteria in the Los Angeles River.**

Dear Mr. Voong,

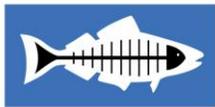
On behalf of Heal the Bay, we submit the following comments on the *Proposed Amendment to the Water Quality Control Plan for the Los Angeles Region to incorporate a Total Maximum Daily Load for Bacteria in the Los Angeles River* ("Draft TMDL"). We appreciate the opportunity to provide these comments.

**I. Compliance Deadlines**

**A. *Dry and Wet Weather Compliance Dates Should not Exceed 10 years and 18 years, respectively.***

The Draft TMDL's proposed *Implementation Schedule* states "Twenty-five years after the effective date of the TMDL, final WLA's and LA's shall be achieved at all segments and tributaries for dry and wet weather". Twenty-five years is *far* too long for compliance, especially in the dry weather. Under the TMDL, Long Beach would have to wait nearly 20 years for their chronically polluted beaches to get cleaned up. As discussed in more detail below, dry and wet weather compliance dates should be separated since wet-weather compliance will likely take significantly longer. We suggest final dry-weather compliance targets, for all reaches and tributaries, take no longer than 10 years. We also believe that the wet weather compliance date should be no more than 18 years.

A tightened compliance schedule for dry and wet weather is consistent with previous TMDLs. The staff report states that "*final compliance dates for this TMDL are based on foreseeable implementation and are reasonably consistent with the Ballona Creek Bacteria TMDL*" (page 64). However Ballona Creek's dry and wet weather Implementation Plans for final TMDL compliance are 6 and 14 years, respectively; nowhere near 25 years. Furthermore, it is stated on **page 45 of the staff report** that "*the*



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*implementation of the TMDL should be coordinated with activities and BMP's that are implemented through other TMDL's...notably the Los Angeles River Metals TMDL."* The *Los Angeles River Metals TMDL* requires 14 years for final dry weather compliance and 18 years for wet weather compliance. Why are final compliance deadlines 11 and 7 years longer for dry and wet weather, respectively, for bacteria TMDL compliance? This does not make sense, since effective metals and bacteria reduction BMP's are often similar or identical. Using a watershed approach, the LA River should be in full compliance with the wet weather bacteria and metals TMDL's by 2028 at the latest. Heal the Bay will support a wet-weather implementation plan the same length as the LA River Metals TMDL: 18 years.

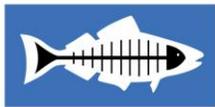
Of note, the 2001 Los Angeles County Municipal Storm Water permit includes requirements for Receiving Water Limitation exceedances, as well as a Regional Board investigation of Permittees and other responsible agencies in order to determine the source of the exceedance. The requirements state that, "*permittees are to assure that storm water discharges from the MS4's shall neither cause nor contribute to the exceedance of water quality standards and objectives...and the discharge of non-storm water to the MS4 has been effectively prohibited.*" Again, this process has failed due to lack of enforcement from the Regional Board. The 1996 (first permit with strong non-storm water discharge prohibitions) and 2001 (first permit with requirement that storm water cannot cause or contribute to water quality standard exceedances) MS4 permits demonstrate how dischargers have failed to take responsibility for approximately 14 years of dry-weather discharges and 9 years of frequent receiving water exceedances. This has been *more* than enough time. Why should the Regional Board grant dischargers an additional 25 years to meet water quality standards? Water quality and public health should not have to wait any longer than 10 years for dry weather and 18 years for wet weather. One should not forget the intended purpose of a TMDL, which is to restore impaired beneficial uses that could not be protected through permit requirements.

***B. Dry and Wet Weather should have separate Implementation Schedules and Compliance Deadlines.***

The Implementation Plan for Ballona Creek's Bacteria TMDL is separated into dry and wet weather TMDL compliance deadlines, unlike the LA River Implementation Plan, which merges final compliance dates for both wet and dry weather. It is noted on **page 46 of the staff report**, that due to much higher water volume during wet weather, exceedances of bacterial targets will be much more difficult to reduce than during dry weather. Like all of the other bacteria TMDLs in the region, it is prudent to separate dry and wet weather implementation plans, because wet weather compliance will be more difficult to achieve. Again as discussed above, we recommend a maximum of 10 years for dry weather compliance and 18 years for wet weather compliance.

***C. Implementation Schedule Requirements should be streamlined to ensure timely water quality standards attainment.***

Additionally, a source abatement program with *proof* of implementation should be required for each river segment within 1 to 2 years after the effective date of TMDL. Load Reduction Strategies (LRS)



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should be completed simultaneously for all segments, in order to reduce compliance time frames. According to the Implementation Schedule (**starting on page 68 of the staff report**), some tributaries have up to 11 years after the effective TMDL to submit a load reduction *strategy* that only includes the first phase of the Implementation Plan. It is unacceptable for the development of *any* load reduction strategy to exceed two years. While *priority* reaches have been established, it is critical for all reaches to achieve final compliance within a timely manner. A structured LRS timeline for priority and outlier outfalls, giving specific dates for milestone targets, should be established by the Regional Board for consistency between reaches.

This is further supported by the *Los Angeles County Municipal Storm Water Permit Requirements from 1996 (Order NO. 96-054)*, which states “NPDES permits for storm water discharges from MS4s to waters of the United States..shall include a requirement to effectively prohibit non-storm water discharges into the storm sewers.” This Order has required the elimination of dry weather non-storm water discharges for 14 years, so these load reduction strategies are already required. If they are not in place, then the responsible municipality is violating the municipal storm water permit. This critical provision in the MS4 has been a complete failure due to the lack enforcement of a very clear requirement.

Also the two-phase, staggered implementation process for each segment adds significant time to reach final compliance. The iterative process, already ineffective in the MS4 permits, should be deleted from the TMDL. Further, a staggered implementation plan is not the most effective way to achieve *timely* final compliance. Each reach should begin implementation simultaneously, to achieve compliance targets throughout all reaches much more quickly. By implementing phase 1 simultaneously for all reaches, the implementation of phase 2 (if needed) would also start simultaneously, thus drastically shortening the implementation schedule by over 5 years. Early implementation for *only* priority segments, may improve water quality in receiving waters by diluting the overall bacteria density, but also may be used as an excuse not to maximize water recycling in the watershed (See below section II).

Additionally, a total of 52 responsible entities are responsible for bacteria WLAs along the Los Angeles River (**Table 9-1**), and through collective collaboration, they can also greatly reduce the proposed 25 year implementation schedule. In doing so, beaches suffering from extremely poor water quality, such as Long Beach, won't have to wait decades for improved water quality.

#### **D. Incentives for Dischargers**

We recommend that temporal compliance incentives be added to the TMDL as they were in the Santa Monica Bay Beach Bacteria TMDL. One incentive would be to augment conventional BMPs such as diversion and disinfection, with the addition of a comprehensive LID approach that includes: 1) a strong ordinance for new and redevelopment (capture and reuse or infiltrate 100% of the ¾ inch design storm on-site); 2) a green streets, alleys and parking lot retrofit program; and 3) a residential downspout redirection, rain-barrels, and rain garden program. If all of these above-mentioned programs are developed and approved, and implementation begins within 3 years of TMDL adoption, we would support the extension of interim and final dry and wet weather compliance deadlines. Specifically, dry



weather interim and final deadlines could be given 3 additional years to comply (13 years for final compliance). In wet weather, discharges implementing all three programs could receive 5 additional years (23 years for final compliance). Providing incentives for a true, comprehensive, integrated approach is critical for watershed based approach to meet TMDL requirements for multiple pollutants.

## II. Water Recycling in Los Angeles

### ***The Proposed Implementation Plan should consider Los Angeles' Future Water Recycling Plan.***

The implementation of Los Angeles' water recycling plan (to be completed in 2011) was not taken into consideration in the Draft TMDL. Water reclamation plants including Tillman and Glendale, which already meet Title 22 water quality standards for effluent, currently discharge over 50 MGD into the LA River. As the state water crisis continues to worsen and there is greater focus to implement the state's water recycling policy and meet stated targets, this vast amount of recycled water must not be depended upon to dilute bacteria densities in the LA River. Without larger volumes of Title 22 effluent from these two facilities, the bacteria densities will increase in the river. As written, the TMDL inadequately provides an incentive to maximize water recycling and to maximize river discharges. The TMDL fails to take into account that Title 22 recycled water volumes in the river will be drastically reduced within the next decade. Please remove the disincentive to increased water recycling.

## III. Interim Waste Load Allocations

### ***Interim Bacteria Reduction should be based on Concentration and not Microbial Loading.***

The Draft Permit provides interim WLAs in terms of microbial loading per day. The interim phase should better reflect final compliance conditions, by allotting dischargers additional exceedance days or higher bacteria targets (in density), in order to identify implementation problems and acclimate dischargers to final compliance conditions. For example, a 50% reduction in exceedance days and/or geometric mean bacterial density makes more sense as an interim target. This approach is consistent with the Regional Board's past TMDL approach and it doesn't rely on calculating inaccurate, enormous loading estimates that are irrelevant for public health protection. As stated under *Allocations* on **page 34 of the staff report**, "*Final WLA's and LA's are expressed as allowable exceedance days because the bacteria density and frequency of single sample exceedances are the most relevant to public health protection.*" The same reasoning should hold true during the interim period.

Further bacteria reduction should *not* be based on microbial loading, as estimating billions of bacteria per day is too broad and unquantifiable and will not help dischargers achieve final WLA's. It is inappropriate to extrapolate findings from BSI studies in order to calculate *E. coli* loads expressed as billions per year. There is no accurate way to quantify *E. coli* loading in MPN/day, as this method shows



only a “snapshot” of water quality from a particular storm drain or tributary at a particular day and time. Setting interim WLA’s as number of bacteria loading per day makes it much easier for dischargers to game the system. In other words, samples collected by dischargers may not give an accurate representation of water quality, due to un-captured intermittent discharges. The only way to justify this approach would be through continuous monitoring of flow and *E. coli* density, which is not feasible with current technology. Even if extensive research was conducted within all reaches, Bacterial Source Identification (BSI) studies do not account for intermittent discharges, or high variability rates of bacteria. Additionally, this is not a reliable approach, due to the inability to predict future problem reaches and/or storm drains (**Page 32 of the staff report**).

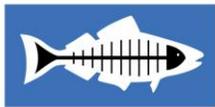
#### IV. Compliance Monitoring

##### ***Compliance Monitoring Should be Strengthened***

According to page 8 (**Attachment A of the proposed Amendment**) only *one* monitoring station per river segment is required for compliance monitoring. This number needs to increase to at least 3 stations per segment (upstream, downstream, and middle) to better improve prediction of problem areas. More importantly, outfall monitoring needs to be a critical part of the program in order to provide needed compliance assurance. A recent court ruling regarding MS4 dischargers’ storm drains (Natural Resources Defense Council (NRDC), Inc., *et al.* versus the County of Los Angeles *et al.*) deemed that “*standards-exceeding pollutants must have passed through a County or District outflow in order to constitute a discharge under the Clean Water Act and the Permit.*” This ruling supports the need for monitoring outfalls in addition to receiving waters, in order to determine compliance. Cities within the LA River watershed must monitor their outfall discharges to receiving waters in order to provide useful compliance information.

#### V. Miscellaneous Comments

- In-Channel Sources—Two studies conducted by CREST (Tier 2 & BSI studies) both focus only on Reaches 2 & 4—how can one assume the other reaches are similar? (**Page 28 of the staff report**). It is our understanding from staff that BSI studies will be conducted during the LRS process. For clarity, the Regional Board needs to add language to the Basin Plan Amendment specifying that extensive BSI studies shall be conducted in *all* reaches.
- **Table 6-2 on page 40 of the staff report** shows the single sample *E. coli* Exceedance Probability for both dry and wet weather based on a Southern California Coastal Water Research Program (SCCWRP) study. Data was not available in the staff report or in the published SCCWRP study. The proposed exceedance frequencies, the backbone of the TMDL, can’t be evaluated without



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any available data, including monitoring location information. We request that the Regional Board provide more information on the study and analysis.

- According to the staff report under dry-weather implementation, downstream-based approaches including in-stream projects, treating and discharging/reusing, and diversion and infiltration, would be created immediately upstream from compliance points. It fails to mention that bacteria TMDL targets need to be met throughout the river, and installing structural controls directly upstream of a compliance monitoring point, would be a misrepresentation of overall water quality results within that reach (unless a full UAA for that in-stream treatment segment is performed and approved by the Regional Board). Please clarify this within the staff report and Draft TMDL.

## VI. Conclusion

In summary, Heal the Bay urges the Regional Board to consider the comments above in order to ensure that water quality standards are met and public health is not compromised for years to come. Specifically, it is critical that compliance should not take longer than 10 years for dry weather and 18 years for wet weather; Long Beach cannot afford to wait 20 years for improved water quality. Additional time should only be allowed if a comprehensive LID approach is taken. In order to achieve compliance more quickly, implementation should occur simultaneously for all reaches and LRS should be developed in the first few years after TMDL adoption. Also it is critical that interim limits be concentration or exceedance-based, as microbial loadings won't lead to water quality standards attainment and are not protective of public health. Lastly in order to ensure compliance, the monitoring program must be strengthened to include more locations in each reach and outfall monitoring to provide greater compliance assurance.

Thank you for the opportunity to comment. Please contact us if you have any questions at 310-451-1500.

Amanda Griesbach, MS  
Beach Water Quality Scientist

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Los Angeles River. Photo: Joy Aoki

*Extensive studies throughout the city have demonstrated that the Los Angeles River, an enormous pollution source because of its nearly-1,000 square mile drainage, is the predominant source of fecal bacteria to Long Beach waters.*

water quality grades.

Last AB411 (2009) grading period, Marie Canyon earned its best ever score with a B grade, which unfortunately fell to a D grade for both year-round dry weather and AB411 (2010) period in this report. Heal the Bay made a site visit in April 2011 which revealed large amounts of organic material downstream from the discharge. This material may be harboring bacteria and contributing to poor water quality. L.A. County is currently working to fix issues with the filtration system, including sediment diversions to limit inefficient filtration, as well as increasing dry weather pump capacity. Heal the Bay will continue to encourage local agencies to create a routine maintenance program to improve water quality at Marie Canyon.

All five monitoring locations at Avalon Beach on Catalina Island received poor dry-weather grades this past year, earning this location the distinction of being one of the most polluted

beaches in the entire state. As usual, Avalon Beach was not monitored year-round despite the attraction of the idyllic town to tourists year-round.

Despite millions of dollars spent on water quality improvements, Cabrillo Beach harborside has earned F grades for all time periods over the last eight years. Regardless of the attempted water quality improvement projects to date, Cabrillo Beach is in near-constant violation of beach bacteria TMDL limits.

After three years of improved water quality during the dry weather AB411 time period, Long Beach water quality dipped by 40% from last year to this year with only 27% (four beaches) receiving an A or B grade. During year-round dry weather only 33% of Long Beach beaches received A or B grades (see Figure 4-6). Long Beach has made significant efforts to locate pollution sources and improve water quality. Extensive studies throughout the city have demonstrated that the Los Angeles River, an enormous pollution source because of its nearly-1,000 square mile drainage, is the predominant source of fecal bacteria to Long Beach waters. Every monitoring location in Long Beach scored a poor grade during wet weather this year. This is the second year Long Beach continued to monitor 10 fewer sites than in 2008-2009 due to cost cutting measures.

Long Beach's Colorado Lagoon earned a spot on the Beach Bummer list this year due to consistently poor water quality. On March 16, 2010, the State Water Resources Control Board (SWRCB) passed a resolution allocating \$1,799,803 towards the Colorado Lagoon Restoration Project. However, on April 5, 2011, due to much more widespread sediment contamination than was anticipated, the SWRCB approved the city of Long Beach's request for an additional \$3.3 million from the Cleanup and Abatement Account. The primary goals of the project are to dredge and remove sediment, install pollution reduction devices and re-vegetate these portions of the lagoon with native plants.

While the Los Angeles River will continue to be

the major source of contamination for Long Beach beaches, the city's investigations have resulted in the discovery and repair of leaking or disconnected sewage pump lines and improperly working storm drain diversions. The city has also implemented an innovative pilot technology to disinfect runoff in the storm drains. Ultimately however, most Long Beach water quality will be directly tied to rainfall amounts and runoff volumes from the Los Angeles River. Unfortunately, as discussed later in this report, the Los Angeles Regional Water Quality Control Board did not take Heal the Bay's recommendation for a tight compliance timeline in the Los Angeles River Bacteria TMDL to ensure that Long Beach beaches do not remain impacted for many years to come. Instead, the TMDL allows 25 years to comply with water quality standards in both dry and wet weather – far too long for Long Beach residents and visitors to wait for clean water.

### Santa Monica Bay Total Maximum Daily Loads (TMDLs)

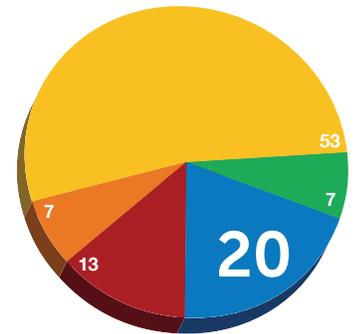
Every beach from the Ventura County line south to Palos Verdes was mandated to meet state beach bacteria health standards 100% of

the time during the AB411 time period (April 1–Oct. 31) by July 15, 2006 and only three allowable violations during the winter dry period (Nov. 1–March 31) by July 15, 2009 or face penalties. In addition, the first winter wet weather compliance point passed in 2009; specifically the TMDL requires a 10% cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group. Marina del Rey's Mother's Beach and Back Basins had a compliance deadline for summer and winter dry weather of March 18, 2007 and Los Angeles Harbor (Inner Cabrillo Beach and Main Ship Channel) passed the compliance deadline for both the AB411 time period and winter dry and winter wet weather on March 10, 2010. The 100% compliance requirement for the AB411 time period means that all of these beaches must be safe for swimming every day for the seven months from April through October. In the winter dry and winter wet time periods, beaches are allowed a specified number of exceedances in order to account for reference conditions. These requirements are within the fecal bacteria TMDLs for Santa Monica Bay, Mother's

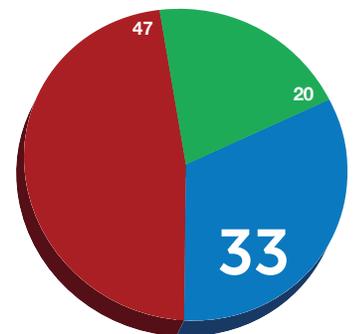
Santa Monica Bay. Photo: Joy Aoki



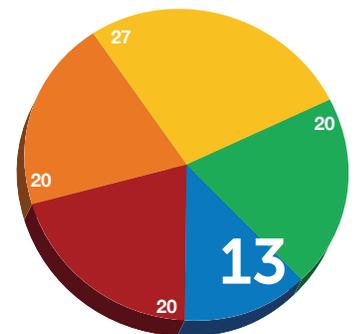
**FIGURE 4-6**  
Percentage of Grades by Time Period for Long Beach



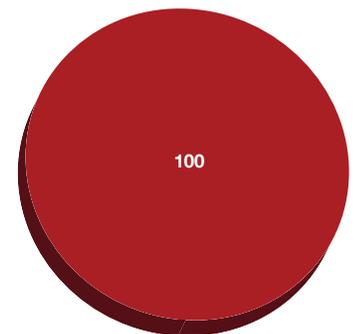
**AB411:** April-October (15 locations)



**WINTER-DRY** (15 locations)



**DRY WEATHER** (15 locations)



**WET WEATHER** (15 locations)

KEY: **A B C D E F**  
Numbers in **BOLD** indicate percentages