

T&D Quality Program Update

Operation Review Forum

November 2, 2021



Quality Update – Tier 1 Metric Targets for 2021

Distribution Construction target 90% (- 11%)

- 79% YTD performance not meeting target

Transmission Construction target 94% (+ 2%)

- 96% YTD performance meeting target

Overhead Detail Inspection target 97% (- 2%)

- 95% YTD performance not meeting target

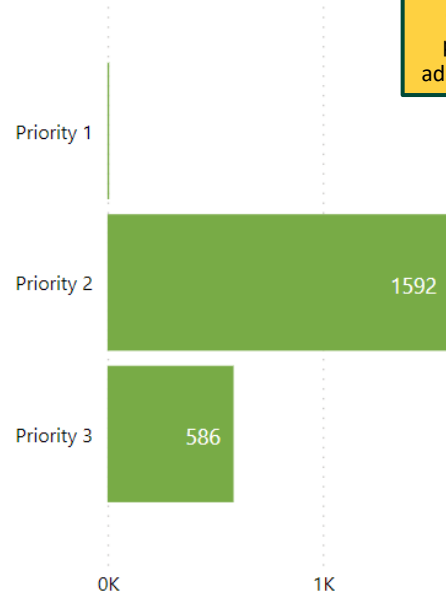
Vegetation Management CCD target 95% (+ 1%)

- 96% YTD performance meeting target

Distribution Construction QC Inspections– YTD 2021 Results Through September

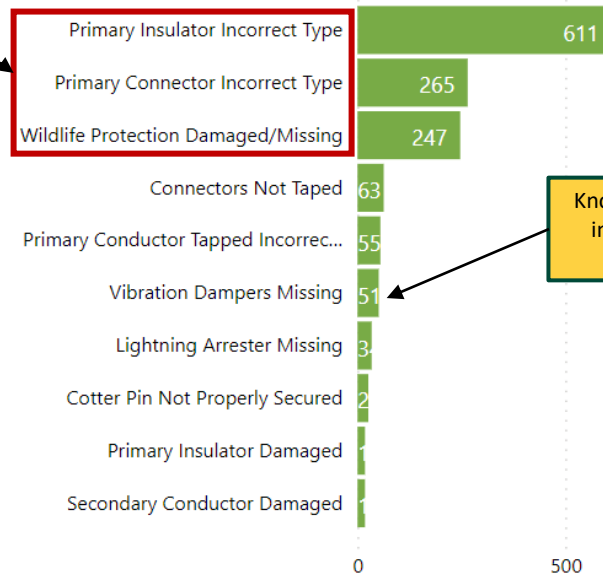
6,259 Total Inspections
 4,950 Pass Total
 1,309 Potential Non-Conformances
 79% P1 & P2 Total CR% ← **-3% from YE 2020**

Findings by Priority



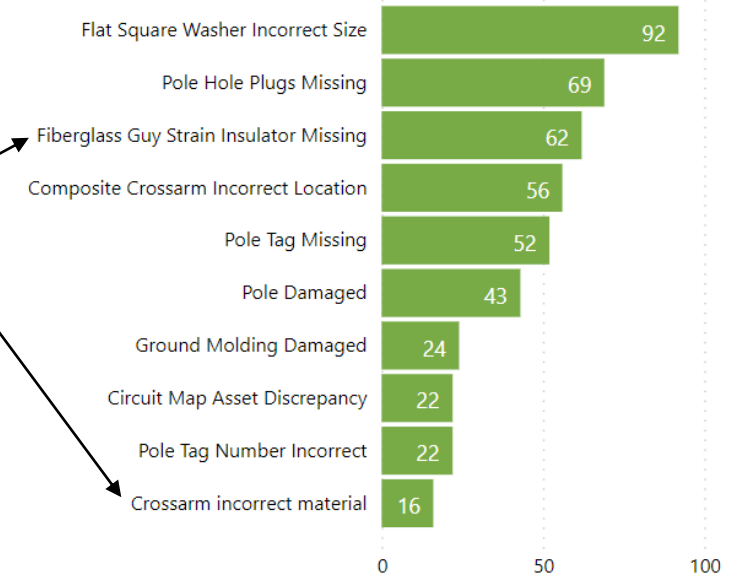
Cause evaluations are presently underway to address these top findings

Top 10 P1 & P2 Finding Categories



Known supply chain issues will impact installation of these components (and more)

Top 10 P3 Finding Categories



Program	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Distribution Construction												
Very High	1,535	454	70%	100.0%	0	0	577	577	327	195	119	128
High	2,945	611	79%	98.0%	1	0	738	739	412	218	229	274
Medium	1,447	215	85%	95.0%	4	0	247	251	101	58	136	158
Low	332	28	92%	95.0%	0	0	30	30	6	6	24	26
Total	6,259	1,308	79%	97.0%	5	0	1,592	1,597	846	477	508	586

This count is representative of 2020/2021 findings only. Remediation plans for prior years past due findings (approximately 900) are underway.

Distribution Construction QC Inspections – YTD 2021 Results Through September

Total

6,259
Total Inspections

4,950
Pass Total

1,309
Potential Non-Conformances

79%
P1 & P2 Total CR%

SCE

936
Total Inspections

836
Pass Total

100
Potential Non-Conformances

89%
P1 & P2 Total CR%

Performance is up:
+3% from YE '20 (86%)

Contractor

5,323
Total Inspections

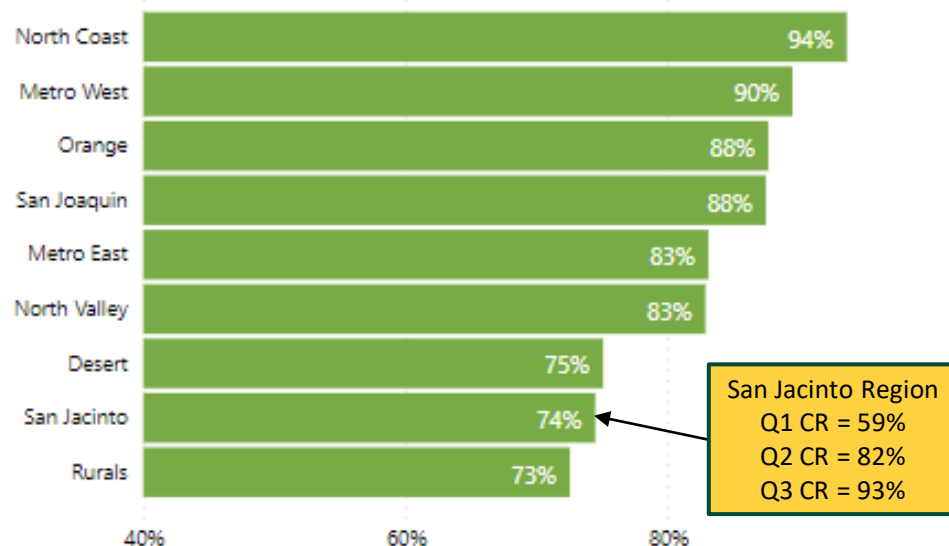
4,114
Pass Total

1,209
Potential Non-Conformances

77%
P1 & P2 Total CR%

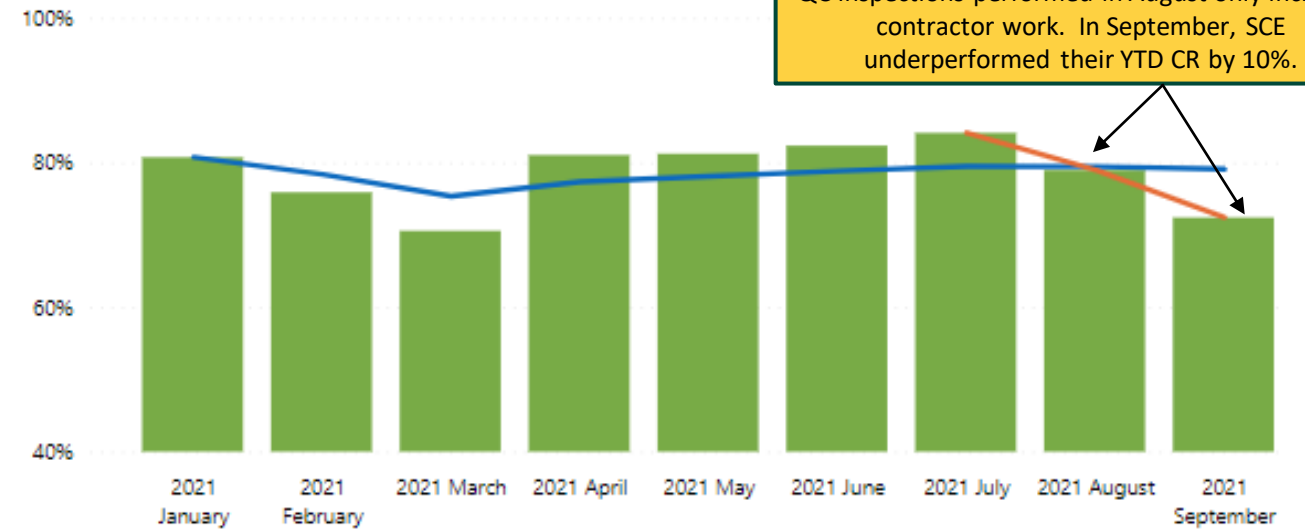
Performance is down:
-4% from YE '20 (81%)

Conformance Rate by Region | District



Conformance Rate Trending

● Monthly CR ● YTD CR ● 3 Month Rolling CR



Transmission Construction QC Inspections – YTD 2021 Results Through September

Due to Anchor Validation support, Transmission Construction QC inspections were paused in July & August.

713
Total Inspections

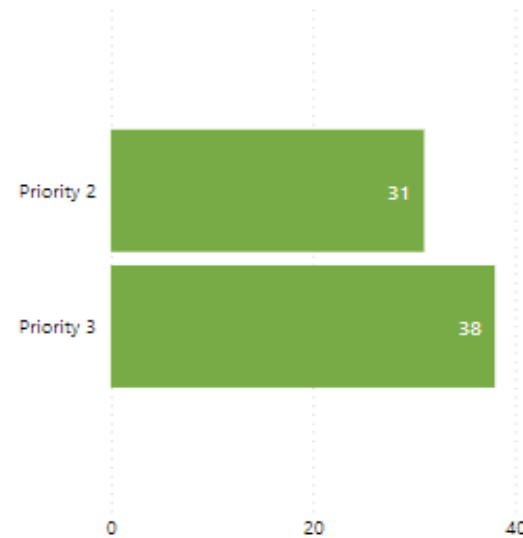
682
Pass Total

31
Potential Non-Conformances

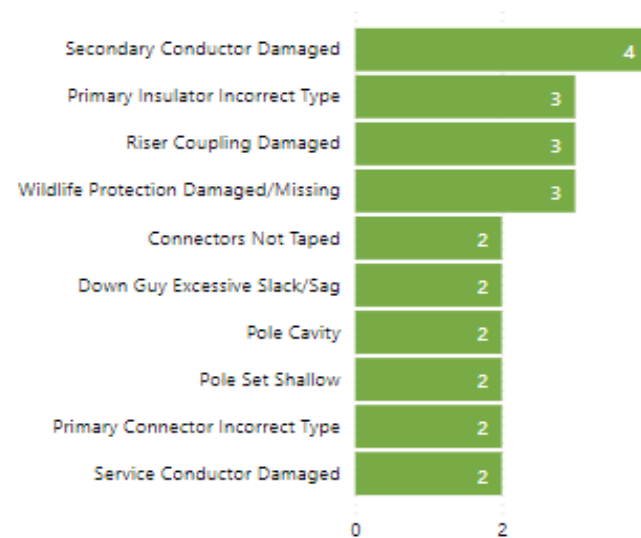
96%
P1 & P2 Total CR%

Exceeding target by 2%

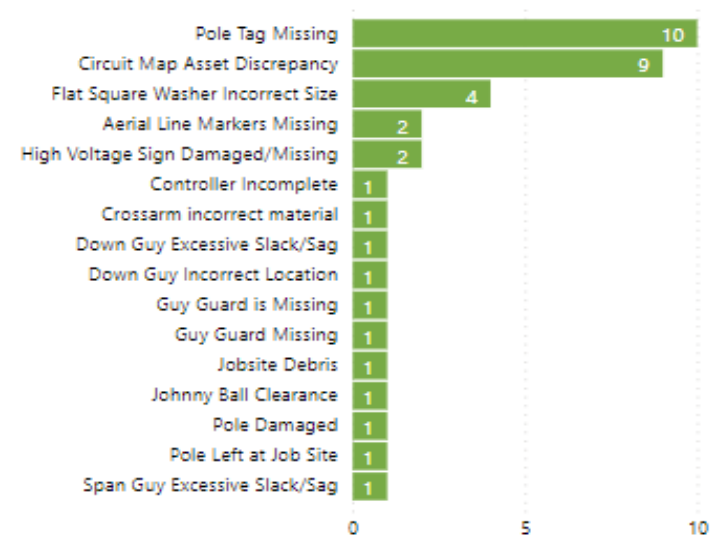
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



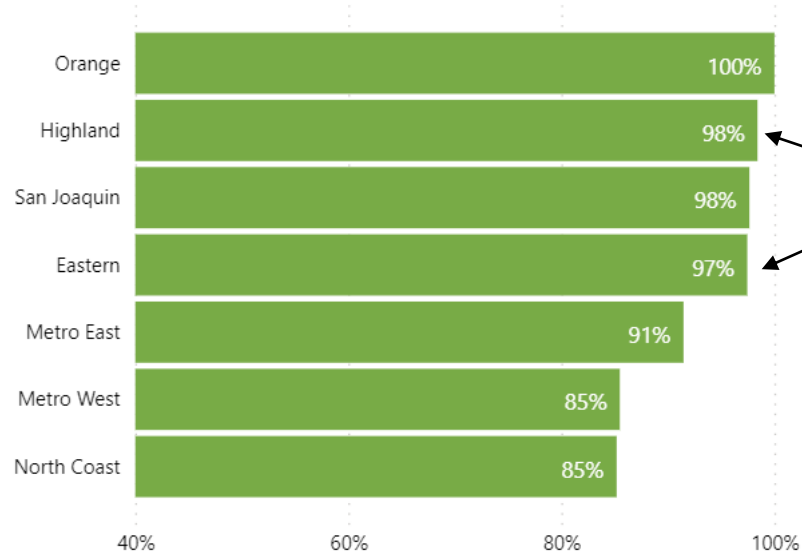
Program	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Transmission Construction	713	31	96%	97.0%	0	0	31	31	15	11	36	38
Total	713	31	96%	97.0%	0	0	31	31	15	11	36	38

Transmission Construction QC Inspections – YTD 2021 Results Through September

Total	713 Total Inspections	682 Pass Total	31 Potential Non-Conformances	96% P1 & P2 Total CR%
SCE	184 Total Inspections	178 Pass Total	6 Potential Non-Conformances	97% P1 & P2 Total CR%
Contractor	529 Total Inspections	504 Pass Total	25 Potential Non-Conformances	95% P1 & P2 Total CR%

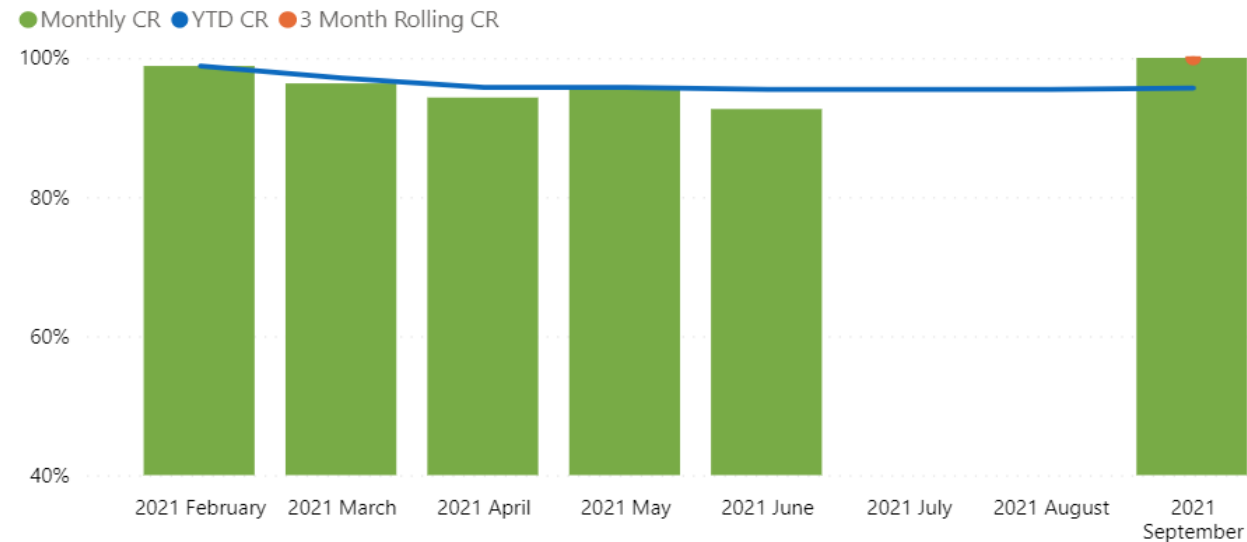
Both SCE and Contractors are performing above the program target of 94%.

Conformance Rate by Grid



Exceptional performance- 67% of all QC transmission construction inspections occurred in the Highland (35%) and Eastern Grids (27%)

Conformance Rate Trending



Overhead Detail QC Inspections – YTD 2021 Results Through September

5,704
Total Inspections

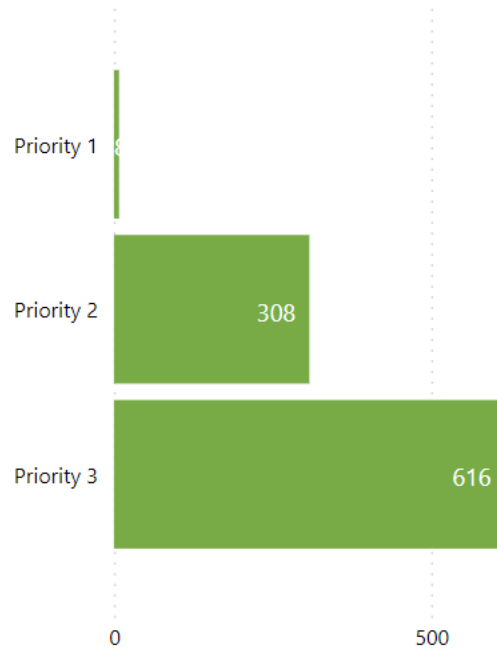
5,413
Pass Total

291
Potential Non-Conformances

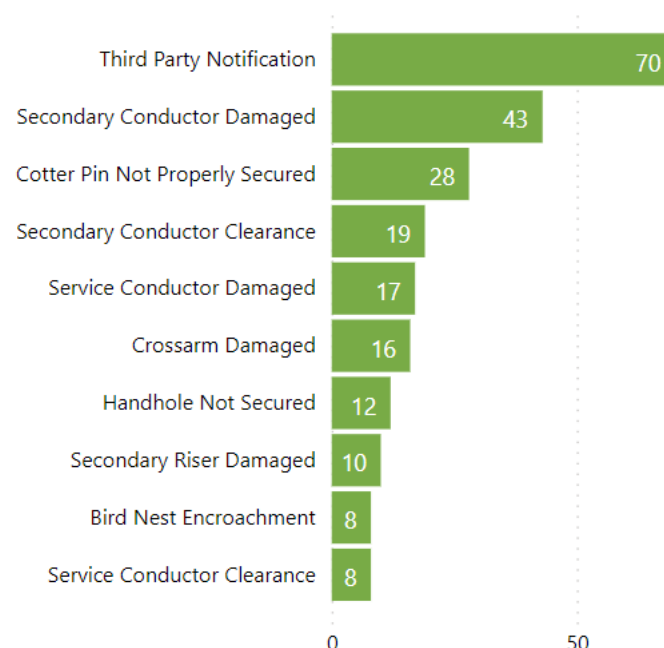
95%
P1 & P2 Total CR%

Tier 1 Target 97%

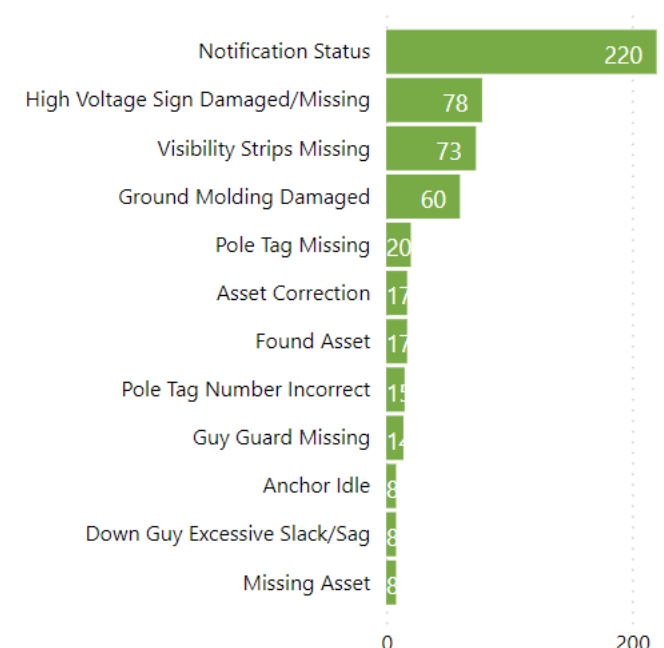
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



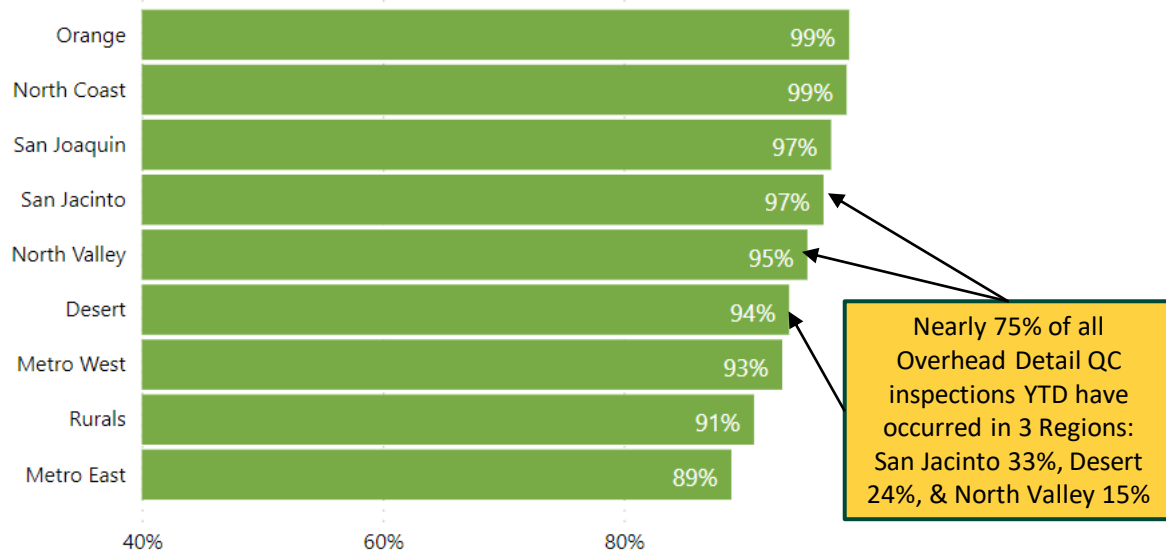
		FLOCS				P1 & P2 Findings						P3 Findings	
Program		Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
ODI													
Very High		1,966	78	96%	98.0%	2	0	80	82	32	13	156	168
High		2,148	102	95%	95.0%	1	0	107	108	73	8	238	261
Medium		1,315	85	94%	95.0%	4	0	90	94	9	5	109	132
Low		485	31	94%	90.0%	1	0	31	32	5	2	51	55
Total		5,914	296	95%	94.5%	8	0	308	316	119	28	554	616

Overhead Detail QC Inspection – YTD 2021 Results Through September

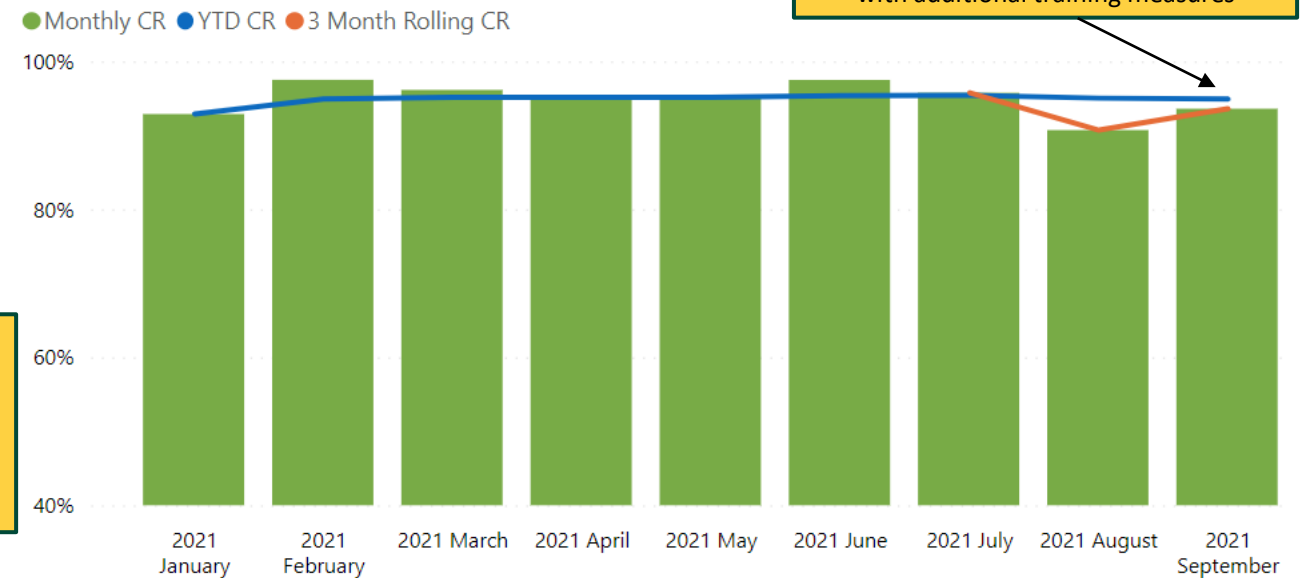
Total	5,704 Total Inspections	5,413 Pass Total	291 Potential Non-Conformances	95% P1 & P2 Total CR%
SCE	2,665 Total Inspections	2,520 Pass Total	145 Potential Non-Conformances	95% P1 & P2 Total CR%
Contractor	3,039 Total Inspections	2,893 Pass Total	146 Potential Non-Conformances	95% P1 & P2 Total CR%

Both SCE and Contractors are performing below the target of 97%.

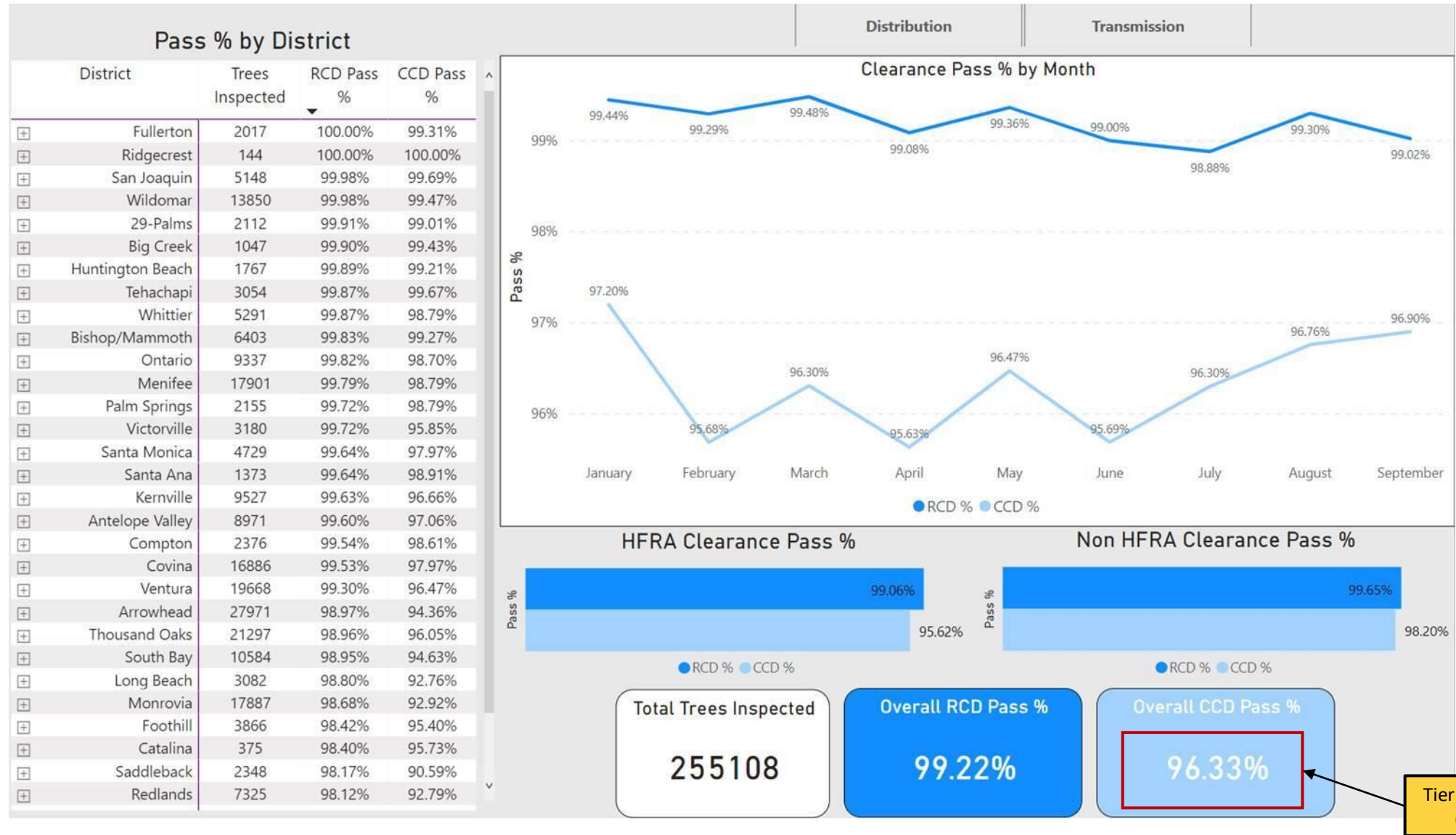
Conformance Rate by Region | District



Conformance Rate Trending



Vegetation Management Inspections – YTD 2021 Results Through September



NOTE: RCD & CCD results indicate tree condition clearance at time of QC, not at the time of

AQL RCD = 100%
AQL CCD = 95%

Compliance Zone		HFRA
T	RCD = Regulation Clearance Distance	10'
	CCD = Compliance Clearance Distance (RCD x 1.5)	15'

Compliance Zone		HFRA	Non-HFRA
D	RCD = Regulation Clearance Distance	4'	18"
	CCD = Compliance Clearance Distance (RCD x 1.5)	6'	3'

Appendix

Additional Highlights

Increased Visibility to Conformance Rates for T&D Quality Programs (OE Goal)

- Tier 1 Metrics have been added to the Quality Dashboard
- A trending procedure has been developed to flag adverse trends proactively
- Presenting monthly results to three additional Core Teams each month- PRS, OS, and PTLC

Update Risk Ranking of T&D Quality Programs (OE Goal)

- Transitioned from REAX to Technosylva for structure level risk data for T&D

Tracking Status for Remediating Corrective Action Program (CAP) Findings (OE Goal)

- Initial CAP dashboard has been developed in partnership with the Data Visualization team
 - Testing and validation phase is near completion, with a release date scheduled for mid-November
- 21 CAP requests have been submitted to date:
 - Completed (11); Open (8); Transferred (2) for Continuous Improvement (CI)

Past Due Distribution Construction QC Findings

- Collaborative meetings with T&D Apparatus Engineering and Enterprise Risk resulted in an overall remediation proposal for approximately 1,600 past due findings
 - For the 333 findings identified as high consequence and having a short turn around for remediation, additional details are being provided to support addressing the findings in an appropriate manner
 - All other findings will be addressed, once the prior subset has been allocated for action