Science and the Truth about the Need for Trout Limit Change (updated 12/20/2013)

On November 6th, 2013, Robin Riechers, Director of Coastal Fisheries, made a presentation to the Texas Parks and Wildlife Department (TPWD) Commissioners concerning the health of flounder and speckled trout. We have through freedom of information requests obtained the PowerPoint slides and the Excel data behind each slide. The audio of the hearing is also available. We sent follow up requests for data and received more PowerPoint slides and Excel data specific to our requests. In this paper we will often time use either a slide and/or data prepared by TPWD or will take the Excel data from TPWD and present it differently. We have also gathered outdoor news reports where TPWD personnel are quoted. Without a doubt any numbers you will see are from TPWD data and are easily verifiable. A complete list of sources will follow and all items referred to in this paper will be available through Internet links for verification. UPDATE: We now have statements released by TPWD in their frequently asked questions section that confirm many positions taken in this paper and thus we have updated from the original paper with **notes on those additions.** The link to FAQs on the TPWD site is: http://www.tpwd.state.tx.us/newsmedia/releases/related/2013-12-18_scoping_coastal_faq/

Before we get into the meat of this paper we would like to take a moment to sincerely thank TPWD staff for their prompt and efficient response to any and all data requests and questions we had. We also want readers to know right now we are just in the stage where the Commissioners have authorized scoping meetings for reduced trout limits but nothing has been decided. The way the process works is TPWD biologists give the Commissioners the facts pertaining to the status of speckled trout and it is then up to the Commissioners to act on those facts. Once scoping meetings have taken place a recommendation will be made we hope based on science. We will at times disagree with the decision to scope and question why it was done but we hope to make it clear those questions are directed at the Commissioners and not those who have in our opinion done an excellent job of gathering the facts. Most importantly the public has a chance to let TPWD know how they feel about this issue and hopefully this paper will give you the knowledge to make the right decision.

We encourage attending the scoping meetings in your area. We are told next week dates and times for scoping meetings will be announced. Right now TPWD is accepting comments at this email address: SWFishComments@tpwd.texas.gov

An online comment form will also be available next week and we will update this paper accordingly. UPDATE: later in the paper we will address this form, which we are not happy with. It asks a leading question and suggests the Coastwide trout populations are in a decline (very much contradicted by TPWD in there own FAQs) and suggests the LLM experiment has had benefits, which are also contradicted. More later and you decide.

UPDATE below are meeting times and places.

All of the following scoping meetings will be from 6-8 p.m. on the dates shown:

- Jan. 7, 2014, Port Lavaca: Bauer Community Center, 186 County Road 101
- Jan. 8, 2014, Rockport: Aransas County Court Room, 301 N. Live Oak St.
- Jan. 8, 2014, Corpus Christi: Del Mar College Center for Economic Development, 3209 S. Staples St., Room 106
- Jan. 8, 2014, San Antonio: Lion's Field Adult and Senior Citizens Center, 2809 Broadway
- Jan. 9, 2014, Port Isabel: Port Isabel Community Center, 213 Yturria
- Jan. 9, 2014, Port Arthur: Gallery Room of the Port Arthur Public Library, 4615 9th Ave.
- Jan. 9, 2014, Dickinson: TPWD Dickinson Marine Lab, 1502 Pine Dr. (FM 517) For more information, contact the following Coastal Fisheries staff members:
- Art Morris, Corpus Christi Field Station, (361) 825-3356, art.morris@tpwd.texas.gov.
- Jeremy Leitz, HQ, Austin, (512) 389-4333, jeremy.leitz@tpwd.texas.gov.

At the conclusion of the Nov. 6th 2013 meeting the Commissioners voted to allow scoping on reducing trout limits from ten to five in what they call the Lower Coast, the Upper Coast and the Middle Coast. Trout limits in 2007 were already reduced from ten to five in the Lower Laguna Madre.

Here is a TPWD map to orient you to the four regions used by TPWD. They are the Upper Coast, Middle Coast, Lower Coast, and Lower Laguna Madre.



Are Trout Really in need of Further Protection?

Before we look specifically at the science a bit of the history of trout regulations is needed. We also need to address the history of efforts to reduce limits from ten to five prior to this recent round of scoping. Here is a summary of the evolution of trout regulations:

- 1978 12" size limit; 20 fish bag limit
- 1980 Monofilament gill nets banned
- 1981 Sale of red drum and spotted sea trout banned
- 1984 14" size limit; 10 fish bag limit
- 1988 Total ban on entangling nets
- 1990 15" size limit
- 2002 Eliminated charter captain and crew limit; bag limit of fish >25" reduced to 1 per day

Here are the current regulations in place:

- 10 fish daily bag
- 15" minimum size
- One over 25" per person per day, counts as part of daily bag
- Special regulation for the LLM (2007)
 - Reduced bag limit to 5 fish
 - Possession limit equals bag limit

In the fall of 2010, for the first time Robin Riechers, Director of Coastal Fisheries, addressed the Commissioners about scoping for limit reductions for the entire coast. The reasons offered at that time are well worth knowing because we now have more data for more years. Overfishing in the Middle Coast was a topic then and if TPWD is consistent it should be now, but it isn't. Bottom line the concerns at the time have as predicted improved to levels that in some cases are record highs. It certainly leaves us to question why if the data is better on the very concern back then are we now raising the issue again.

Below is Robin Riechers quoted in the Houston Chronicle, Shannon Tompkins article in December of 2010. The article generally comments on how trout have been stable, doing well, and cites positive gill net, bag seine and creel studies. However back then scoping was considered because:

"But some recent hiccups in those generally positive numbers have triggered a push for the TPWD to consider more conservative regulations as a way to maintain healthy trout populations.

"Over the past few years, we have seen a decline in landings and abundance of trout in some bay systems on the central coast," said Robin Riechers, director of the TPWD's coastal fisheries division. "That's generated interest in possible conservation measures."

Three bay systems — West Matagorda, San Antonio and Aransas — have been the most "problematic," Riechers told the Texas Parks and Wildlife Commission's regulations committee during a briefing this past month. After enjoying peaks in trout abundance and landings earlier this decade, the three bays have each seen steady decline.

The problem appears to be a combination of consecutive years of poor spawning success and recruitment of young trout into the fishery at the same time **heavy fishing pressure** was knocking a hole in the adult population. And trout seemed particularly vulnerable; other species such as redfish and black drum were doing great in the same bays where trout were stumbling."(Emphasis added)

Remember those words about an interest in "conservation measures" which is clearly distinguishable in our minds from "trophy management". And keep this thought in mind; if the Middle Coast has cycled up to record highs in trout recruitment, gill studies are back to normal, and the data is clear it has improved why is this issue on the table again? It will all boil down to trophy management at the end of the day.

The bottom line on why coastwide scoping for reductions first came up in 2010 despite all but the Middle Coast doing well is best described by sports writer David Sikes for the Corpus Christi Caller Times who reported on proposed scoping in the fall of 2010 that:

"I hesitate to call this a department proposal, because technically it's not. Pressure from anglers who would like to see a five-fish trout limit has prompted TPW officials to broaden the conversation and take it on the road."

On November 3^{rd} 2010 when the original Commissioners meeting on scoping took place Robin Riechers said at the meeting:

"So what -- in summary, that basically -- our conclusion is that we've got some real strong year classes emerging in the midcoast areas. We're already picking those up in our gill nets and in the legal fishery. We're seeing some strong year classes in our bag seines that are following those, as well.

When viewing this information, our Coastal Resource Advisory Committee recommended that we go to scoping with this. They believe that we should go have a discussion about some conservation measures regarding spotted sea trout." (Emphasis added)

We have searched the TPWD website and have no idea who is on the "Coastal Resource Advisory Committee" but without knowing more we would bet a certain well organized group of fishermen is well represented.

We understand that the Commissioners asked the scientist to take another look at scoping after they decided against it in 2011 and the Nov. 6, 2013 meeting was called for that very reason. What we don't understand is why when the Commissioners heard the great news on trout health at that meeting did they vote to take this issue back out for scoping? What you read above and what you will see below makes us suspicious that politics and outside influence are involved. Those are just our opinions and nothing more but you will at least have the information you need to decide.

To see the pattern take a look at what was said when TPWD decided against reductions in 2011 and see what has changed to raise the issue again. This is from the Shannon Tomkins Houston Chronicle article Jan. 30th 20011:

"Staff would recommend removing spotted seatrout from consideration for rules proposals, at this time," Robin Riechers, coastal fisheries division director, told the Texas Parks and Wildlife Commission's regulations committee in a Wednesday meeting."

From the same article:

"Eye-opening data

In Aransas, San Antonio and Matagorda bay systems, where trout populations and catch rates had declined for several years this past decade, TPWD gill net sampling showed a recent strong upswing in the number of "sub-legal" (less than 15-inch) trout. Also, this year's bag seine sampling indicated recent spawning success; Aransas and San Antonio bays, Riechers said, showed record numbers of trout fry. Texas' trout population is stable, as are fishing pressure and angler landings of trout." (emphasis added)

OK since we are talking about scoping for limit reductions AGAIN lets see what the science says. It must have really turned south right? The answer is a resounding NO.

The bottom line issue should be: Based on scientific data are trout in need of more "conservation" protection from overfishing?

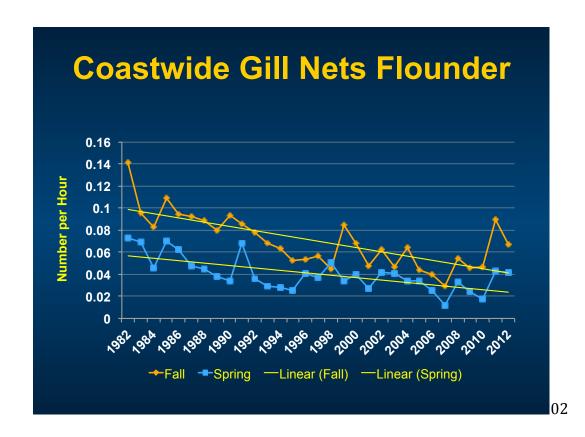
When you see the data below we will be surprised if you answer yes. Before we go there TPWD relies on three primary types of studies to gauge the health of any fishery. They break them down into fishery independent studies and fishery dependent studies. The independent studies are gill net studies and bag seine studies. The fishery dependent studies are called creel studies, which rely on fishermen participation. This paper would triple in size to explain in detail how gill and seine studies are conducted but know established protocols are out there to insure the integrity of the data. Basically gill nets capture adult size fish and bag seines catch anything smaller including fry. Often times when TPWD officials refer to bag seines they will relate those studies to "recruitment", meaning the upcoming class of sub-adults on their way to being legal fish.

As a side note gill net studies take place in the spring and fall. TPWD relies more on spring (before fishing pressure) studies so we have focused on that season as well. Much of this paper will involve showing you historical data on gill net, bag seine, and creel studies.

Note to reader, you will see aggravating spacing in this paper from now to the finish. The charts are the culprits and we could squish them to make the spacing more reasonable but that alters the visual geometry of graphs as given to us by TWPD and we do not want them visually altered at all so bear with us.

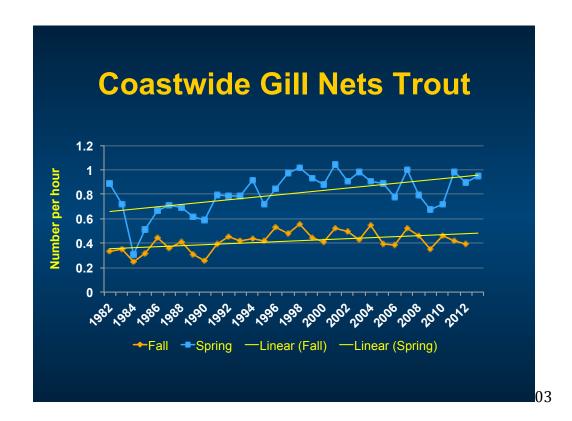
The Science: Gill Nets

Perhaps the best way to show you scientific data that calls for protection from overfishing is to show you data on a species that truly did need help and see how trout compare. Here are gill net studies for a fish that has experienced both sport and commercial overfishing until recent changes. The downward trend is easily seen.

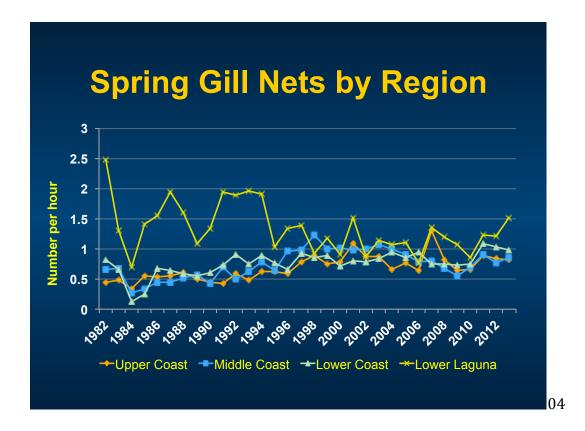


In 2009 gigging flounder in the month of November was outlawed and limits were reduced to two. We all can agree flounder were overfished and particularly vulnerable when they ran in November. The downward trend line (added by us to TPWD's slide) since the 1980s speaks for itself. Bottom line this is the type of science we should be looking for when studying trout and deciding if overfishing calls for limit reductions. Also pay attention to the big jump after 2009, as we should look for comparable boosts in the same type of studies for trout when limits were reduced in the Lower Laguna Madre (LLM). What you will see in the LLM is not only did the data not go up, but also it went down for three years post limit reductions.

Now contrast Coastwide gill net studies for trout for the same period.



The obvious upward trend speaks for itself and this picture is nothing like flounder. Look at the data for spring (relied on most) since 2010 when scoping was first put on the table and all a reasonable person can conclude is we have seen significant coastwide improvement. Let's drill down a bit and look at gill net data broken down by the four regions for the same period of time.



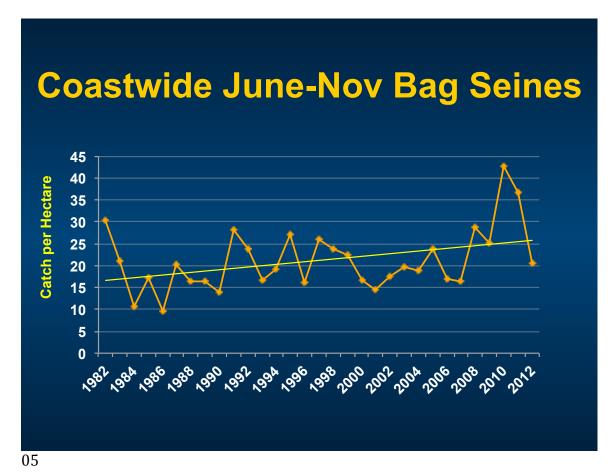
Notice how generally all four regions for the most part rise and fall cyclically together. It should be evident that all four regions are on an upward trend as reflected before. Also notice how long before the Lower Laguna reduced limits it experienced its all time highs and they have not been seen since limit reductions took place in 2007. Also keep in mind for later that not only have those highs not been achieved since the changes, but consider the LLM is always the top in fish per hour both before and after changes. This data will come up again when we try to see if there are any real gains in the LLM.

Notice how the problem child Middle Coast has since 2009 moved nicely upwards off its lows. This data swing was accurately predicted by TPWD and was a big reason why limits were not reduced.

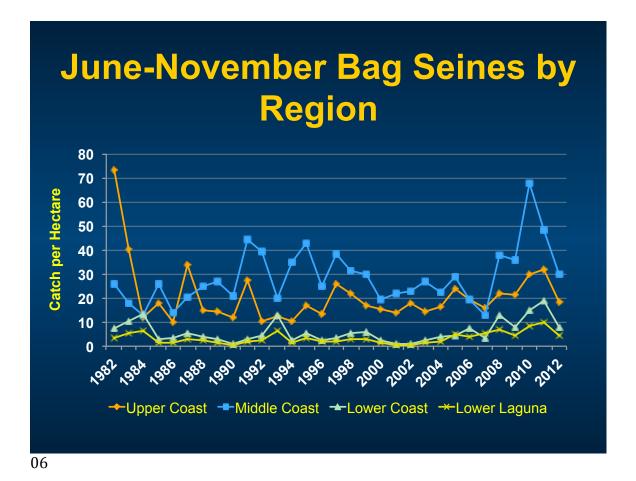
You really do not have to believe us in interpreting the data because TPWD agrees since gill nets were banned in the 90s we reached a level afterwards that has been stable and that is despite all the fishing pressure for those periods. They agree fishing pressure has stabilized and in general trout populations are healthy. Listen to the 2013 audio for the details and listen to the separate clips we have made from the master file.

Bag Seine Studies

Now lets move to bag seine studies. Here they are coastwide and again they reflect an upward trend line added by us and clearly show a healthy trout population.



We have had two of the highest years EVER since the issue of reductions came up in 2010 and four of the all time top years in the last five years. What should cinch the deal is recall we did this, meaning scoping for reductions, the last time because of concerns for the middle coast. Here is the data broken down by region:



Look at who is leading or rather more accurately taken back the lead for highest catch per hectare. The Middle coast, which you will recall got this all started because of a dip pre 2010 and has since set records and is still the highest of the bays in 2012. It is not a coincidence that the Middle coast, like all regions has seen these swings or cycles. Notice the LLM post 2007 is still seeing swings as well. We will have much more discussion on the LLM later in the paper.

We are wondering at this point if anyone else is starting to think these populations are cyclical and dependent on environmental conditions like salinity unrelated to fishing pressure?

TPWD agrees that fishing pressure has leveled off and actually shrunk according to license sales and creel studies. So if pressure is constant and the environment still causes cycles we fail to see how reducing limits can affect something unrelated to fishing pressure. There are a lot of internet board arguments claiming we have way to many fishermen and we will just leave it at TPWD acknowledges fishing pressure has dropped off and is fairly constant. Until science says otherwise we agree with TPWD. Here is Robin Riechers in 2010 at Commission meetings on the subject:

Just to look at total fishing licenses sold, in the red line there, and it's on your left-hand side there or right-hand side -- I'm sorry -- and fishing efforts on your right-hand axis. Basically, the take home message here is that our fishing effort rose through the 1980s and basically capped off in about 2000 and we've been relatively stable, with a slight down trend since then.

We can continue this bombardment of data that clearly shows trout populations are healthy but to cut to the chase here is the ending slide Robin Riechers used to describe this very issue to the Commissioners in the November 2013 meeting.

Status of Spotted Seatrout

- 2011 landings (private + party) are the 2nd highest on record
- Spring 2013 CPUE 5th highest on record
- All bays reported average to above-average gill net cpue
- Recent gains are from four years of strong juvenile recruitment
- Bag seines reflect strong recruitment

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Yet some force out there thinks we need to reduce trout bag limits. You have just seen the science described above except for 2011 being the second best on record for landings and 2013 CPUE being the 5th highest. CPUE stands for catch per unit effort. We just do not get why after it was determined the prediction that the Middle Coast would heal came true, the bag seine studies show three of the best years EVER, and fishermen literally caught the second highest amount of fish EVER in 2011 are we even thinking about this issue again. Science and common sense are not driving the issue so we suspect again it is politics and outside influence.

UPDATED: Now for TPWDs official position on the general heath of trout as stated in Dec. 2013 FAQs

http://www.tpwd.state.tx.us/newsmedia/releases/related/2013-12-18_scoping_coastal_faq/

 What is the status of spotted seatrout populations in these regions?

In 2002, statewide spotted trout harvest regulations were changed to

a 10-fish daily bag and 15-inch minimum size, with 1 fish over 25-inches allowed. Since implementation of these regulations, fishery independent sampling surveys from each of these areas indicate stable or slight increase in relative abundance of spotted seatrout. Recreational harvest from these areas has also showed increased landings with the exception of a drop in trout landings during the 2012-2013 season in the LLM.

Recruitment of spotted seatrout from each of these areas has remained relatively stable. The declines in relative abundance observed on the middle coast in 2009 were corrected with the high recruitment levels observed in 2010 and 2011. Recruitment levels in 2012 are consistent with levels from previous years, with the exceptions noted above for 2010 and 2011.

In 2007, special rules were adopted for the lower Laguna Madre (LLM) of which size limits were the same as the rest of the coast, but the bag limit was reduced to 5 fish. Since implementation of these regulations in the LLM, gill net surveys show that relative abundance has remained relatively stable though considerable year-to-year fluctuations occur. For example, the fall 2013 gill net catch rates are one of the lowest observed following one of the highest catch rates recorded from the spring 2013 sampling.

Are spotted seatrout overfished?

No. TPWD gill net, bag seine and harvest data indicate they are not overfished. Fishing pressure and landings are different for each bay, with some bays higher than others. Spotted seatrout are the most sought after species by anglers in Texas inshore waters, but the landings are currently at a sustainable level. A reduction in landings would increase the number of older and larger fish in the population."

We will see about that last statement later. I think what we just saw is a wholehearted agreement with us that the health of trout is fine coastwide. Pay attention to what they are saying about the LLM and the fall of 2013 Gill nets being a record down data point and the fact they are still seeing swings. Also notice they mention landings for the LLM are also down in 2012-2013. More on this later.

Now here is the online questionnaire you can answer and express your opinions. As we stated before we take issue with the manner the question is presented and here is why. You have just learned the rest of the coast is doing fine and TPWD admits it. So why would you suggest that the rest of the coast was/is like the LLM and in DECLINE and suggest the LLM model could help with that alleged DECLINE?

Here is the question:

"The regulations within the LLM were instituted to stop and **reverse the downward trend** in overall abundance and spawning biomass in the region, and to ensure that fish reach larger size classes. The fishery in **the LLM has benefited from these regulations**. As these regulations have proven beneficial in the LLM, the department is considering expanding these regulations, or a variation thereof, to other areas along the coast."

As a real District Court Judge said who doesn't fish "that is a loaded question which assumes many facts which have to be backed up by evidence"! Let us start with WE DON'T HAVE A DOWNWARD TREND TO REVERSE. And as you will see below the benefits of the LLM experiment are questionable at best. Frankly given how candid TPWD is in their FAQs we have no idea how this issue got phrased as it did. Here is the link to the form so if you cannot make the meeting let them know your opinions and if you don't like how they framed the issue you have blanks to do that as well.

http://www.tpwd.state.tx.us/business/feedback/public_comment/proposals/2014 01_scoping_coastal.phtml

Before we move on to studying the LLM to see if that experiment leaves us with any compelling reason to limit trout we will end this section by quoting one of the commissioners at the end of the Nov. 6th 2013 presentation. We can't tell from the audio but when the transcript is available we will identify the Commissioner. This is in response to the glowing data on trout and the general mood to go ahead with scoping despite the science.

"If we don't do nothing else we stop the naysayers that say the reason we don't get any bigger fish is because we are catching too many"

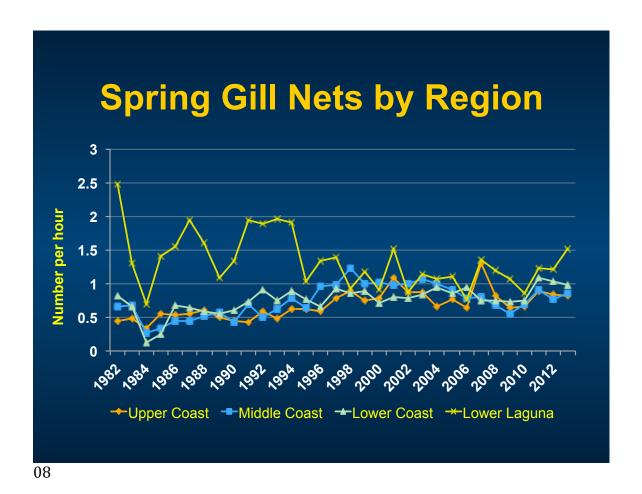
We find it disturbing that time, money and effort is being expended to convince a few fishermen the knowledgeable and hard working fishermen do who manage to catch ten fish are not the reason for their failures to catch bigger fish.

Does The Lower Laguna Madre Model Offer any Science that Shows a Real Benefit?

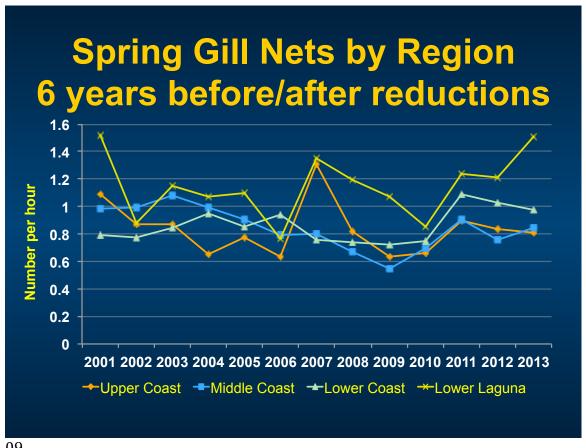
Since general data on the health of trout is very good and certainly none of the data remotely resembles flounder like science we thought well maybe the LLM data offers a solid reason for change. It doesn't and below are the facts.

Gill Net Data

Below is the series of gill net data for the spring which is the season primarily relied on by TPWD. First lets look at LLM along with all other regions. Notice long before limits were reduced the LLM generally lead the way with catch rates. This is important to know when we drill down to years before and after limits were reduced as you will see the LLM continue to be higher. You might also notice levels achieved in the LLM in the 90s and again in 2001 still have not been seen after reductions. You can also see a general coastwide relationship meaning often times all regions are up or down in a particular year. That all up or all down remains generally true even after reductions. The implication being reductions have not smoothed ups and downs out. Smoothing out the ups and downs is suggested by TPWD as a benefit of limit reductions.



Since we have six years of data post limit reductions we think it is fair to do a six years before and after comparison. We think it is more than fair since one would logically expect the years leading up to change were bad and would serve as a nice contrast to the years afterwards. What you see below is again the LLM data both up and down with the other regions just like before. Spring 2013 LLM gill data does appear to be a single data point that supports distinction and it will be addressed below.



Now below is just the LLM for six years before and after the reductions with a trend line that has a very slight increase. The slight increase is clearly driven by the spring 2013 data. **UPDATE: TPWD now admits the fall 2013 gill net data is one of the worst ever in the LLM and that will nullify the spring data as described below.** We also know from the update 2013 was low again in landings. What all the above tells us is the only good single data point, spring 2013 gill nets, is indeed a questionable data point because in a year when fishermen did little damage catching the fall gillnets turned into a record low.

If you look at the chart above you see all the regions, not just the LLM had increases in 2011 and 2012 so places that catch ten fish went up as well. It is the 2011,2012 and 2013 data, which drives the trend line slightly upwards. Now with the fall doing so poorly the slight upward swing is very questionable and probably flat.

One of the rational behind cutting back to five despite trout being healthy is it will reduce swings we see in the data or smooth it out. We see the ULM swinging both up and down just like the other regions with the trend line that closely resembles other places where limits are 10. AND NOW TPWD admits there are still swings in the LLM (see FAQs)

Spring Gill Nets by Region

Lower Laguna

1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Lower Laguna — Linear (Lower Laguna)

We are just not seeing any data that shows any significant statistical increase. In the first three years after reductions the trend was clearly down. While 2013 offers some hope it is not a trend and frankly has been beaten nine times in prior years when limits were ten. UPDATE: the Dec. 2013 FAQs section of TPWD is now pointing out that the Fall of 2013 is a LOW for gills nets in the LLM. That data also points out landings as discussed below were once again DOWN in 2013.

If you take 2013 out of the data it is flat as a board. If we consider fall of 2013 recently released data as a new low that definitely calls into question the spring as a reliable data point. If you compare to other coasts for the same time, they go up as well and their limits are ten. TPWD is now admitting there are still swings in gill net data in their Dec 2013 FAQs. The whole point of reducing to 5 was supposedly to reduce or smooth out those swings and that is not happening

Here are the LLM specific Comments in the Dec. 2013 FAQs:

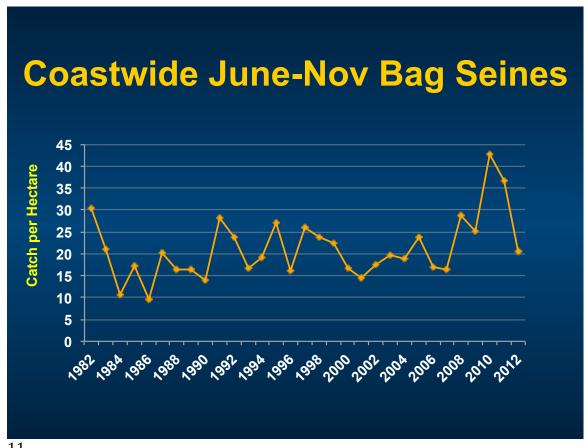
"In 2007, special rules were adopted for the lower Laguna Madre (LLM) of which size limits were the same as the rest of the coast, but the bag limit was reduced to 5 fish. Since implementation of these regulations in the LLM, gill net surveys show that relative abundance has remained relatively stable though considerable year-to-year fluctuations occur. For example, the fall 2013 gill net catch rates are one of the lowest observed following one of the highest catch rates recorded from the spring 2013 sampling"

Here is the point. The BEST that can be said for the LLM is the gill net studies have been relatively stable with considerable year-to-year fluctuations. So has the rest of the coast my friends and we keep ten, not five. TPWD cannot say the gill net data is distinguishing itself from any other place where fishermen are keeping ten fish.

Before we leave gill nets you should know in the meetings these are the statistics most relied on for improvement in the LLM. The reason is the bag seine studies have been a true disappointment.

Bag Seine Data

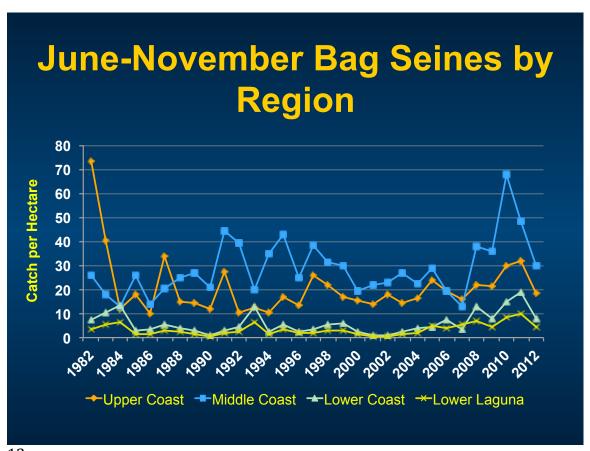
Now lets look at Bag Seine studies, which capture sub-adults (fry) too small for gill nets. One would think if the reductions were having any effect we would see increases here. Unfortunately the data says we are not and Robin Riechers agrees in the Nov. $6^{\rm th}$ meeting (see audio links). When limits were reduced TPWD is on record predicting an increase of 15% in spawning biomass, which is a fancy way of saying fish big enough to spawn. Seine studies capture the "fry" or babies from those spawners and it just is not happening. Here is coastwide data on seine studies.



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It is easy to see the three to four of the coastwide top years ever and understand why in 2010 the Middle coast problems were expected to ease. The above coastwide Bag Seine data as mentioned earlier is a very healthy picture with a definite upward trend. Robin Riechers admits the big gains but cautions they have seen "two down years". The problem is the supposed down years are after all time highs and more importantly are average years down from highs and not lows when looked at historically.

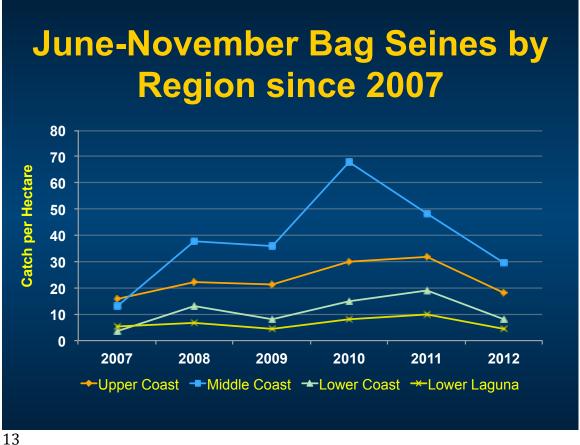
Now let's see how the LLM stacks up with the rest of the coast. Here is the all time data by region.



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Notice the LLM is always low on catch per hectare. Also notice the Middle coast has really improved and this was a significant reason why limit reductions did not pass

last time. Now lets look at the LLM for the years since reductions and compare to the other regions.



It is clear to us the LLM is not seeing any statistically significant gain in bag seines. Again TPWD is aware of this data and mentions it in the 2013 meeting. Here are the exact words:

"So in some respects the Lower Laguna Madre has not increased the young of the year or hasn't increased recruitment necessarily but it has pushed some of those fish to higher size classes." (See audio clips)

We will deal with those higher size classes and what that means below but please let it sink in that since 2007 and now with six years of data we are seeing nothing in the bag seine study data that gives us any real basis in science to say the reductions in limits are working. Also know that in 2012 the numbers for catch per acre are exactly the same as they were six years earlier with NO improvement.

Also notice the LLM swings up and down with other regions so we question the validity of any argument that reducing to five will smooth out the ups and downs. In 2012 the numbers for the LLM are the same as they were the very year limits of five fish were adopted and that is after five years of supposed improvement.

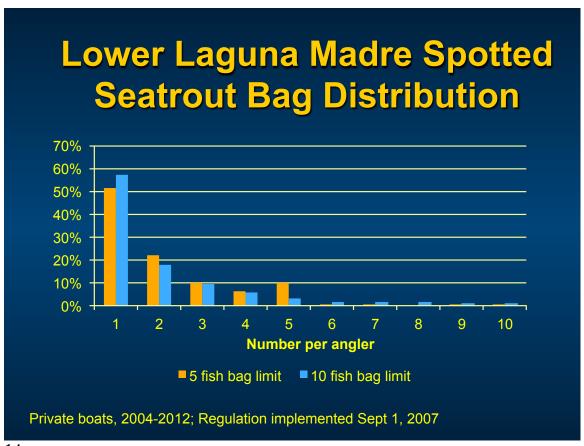
Fish Landings

Now let's look and see if we can verify some claims in the press about more fishermen in the LLM catching more fish now that limits are reduced. Specifically the Shannon Tomkins, Nov. 16th 2013, Houston Chronicle article, ironically entitled "Falling Trout numbers will Force Changes", says:

"Prior to the five-trout limit, only **4 percent** of the anglers on the Lower Laguna Madre landed five specks in a day of fishing. Two years after the reduced limit took effect, **10 percent** of Lower Laguna Madre anglers checked in TPWD creel surveys had landed five trout - more than twice as many as before the rule change. And the fish were, on average, larger." (Emphasis added)

This same misinformation is quoted in David Sikes Nov 21st 2013 article and it is simply wrong as we will see below. Here is what the article said:

We asked TPWD to supply us with the data to support these remarks and was provided with the below slide. We will deal with "more caught" first then dispel the "on average larger" later. This is data from 2004 to 2012 that compares percentages of fishermen who caught certain numbers of fish before the limit reductions and after.



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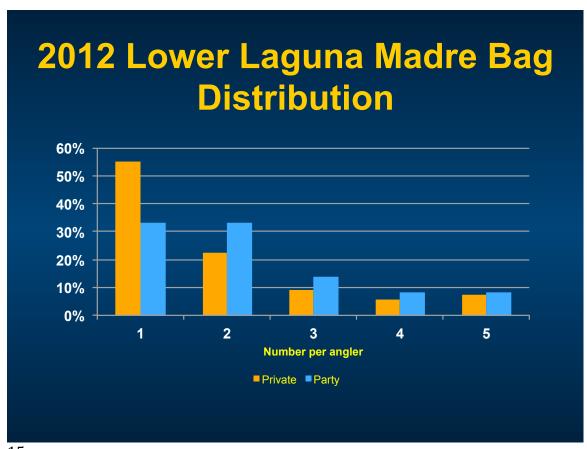
The explanation we were given for the remarks in the press was when a five bag limit was adopted 10% of the fishermen since 2007 are catching five fish and when

[&]quot;When the change took effect, only about **4 percent** of anglers reported catching five trout during a day of fishing. Today, that percentage has more than doubled to **10 percent**. And on average, they're catching bigger trout." (Emphasis added)

it was a ten bag limit pre-2007 only 3% of the fishermen caught five fish. You can see those numbers above 5 in the horizontal axis "number per angler" above. Anyone see what TPWD forgot to include? If you answered they forgot to include in the pre-2007 ten-bag limit era the guys/gals that caught six, seven, eight, nine, and ten fish you get a star. Another way of saying this is since limits were reduced to five, 10% of the fishermen in the LLM are catching five fish. When the limits were ten fish 3% caught exactly five fish but another 5% of the fishermen caught "five and more". As one person said, "last time I caught six fish I had five in the box before the sixth". When you add them to the fishermen who just caught just five the percentage goes to 8%, which is double what the article mentions and certainly not close to twice as many now that limits are reduced

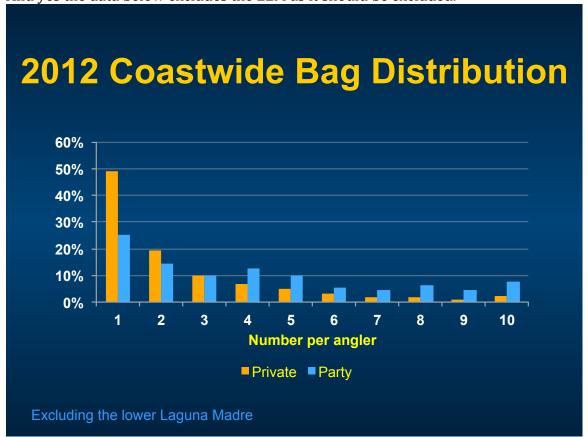
The statistics used By TPWD are a combination of private anglers and guides. In our opinion we should look at non-guides for direction and below might just surprise you about who has an easier time catching fish according to the most recent data in 2012.

In 2012 7.2% of the LLM private (non-guided) fishermen caught five fish (notice that is below the 8% historical LLM ten fish limit number). Coastwide in 2012 where limits were ten fish 14.7% of the private fishermen caught "five and more" trout. That means on a percentage basis nearly twice as many coastwide fishermen got to "five fish and more" than did the LLM fishermen. Who has a better fishery? Here is the data:



15

Private party exact number is 7.2% in the Excel data and when you use the below chart and you add the percent that caught five thru ten fish together it equals 14.7%. And yes the data below excludes the LLM as it should be excluded.



16

Now for more surprising facts. For those of you that think LLM is the fishing mecca and wish to spend your dollars there look at how the guides in studies coastwide that excluded the LLM (slide directly above) did compared to the 2012 guide numbers in the LLM (2ond slide up). 38% of non-LLM guides in 2012 caught with their clients five or more fish whereas only 8.3% of the guides in the LLM caught five. Where are you going to fish?

If they want to use the latest data the real statement to the press should be: In 2012 in the LLM 7.2% of the non-guided fishermen caught five trout, which is below the 8% that used to catch that many before limits were reduced as well as one half as much as the Coastwide average of 14.7% for 2012. If you want a guided trip in 2012 8.3% of the LLM guides caught five fish but elsewhere 38% of guides did that or better.

We have been advised by TPWD, via email, that our interpretations of the data above, pertaining to the LLM versus coastwide bag distributions are indeed correct. We believe their failure to add the fishermen who caught more than five to those who caught just five was an honest mistake and it is certainly not something they are trying to hide at this point. However do not let the often reported in the press numbers fool you. They are dead wrong.

UPDATE: we now see in the FAQ's section that the LLM is in 2013 having another bad year for landings and will update once we get that data but it will

show fishermen on other coasts are once again having an easier time catching more fish And that is despite what is represented in the press.

Now here is another claim, which also was quoted by David Sikes in the Corpus Christi Caller Times and Chronicle article that needs perspective. You also hear this statistic mentioned at the Nov 6^{th} 2013 commissioner hearing as well. It is the claim that "70% of the fishermen only catch two or fewer trout".

Ok the statistic is solid and accurate but the implication is misleading. The implication clearly is if we reduce limits to five it will somehow help fishermen catch more than two fish. Well let's see how six years later they are doing in the LLM where the limits were reduced. In 2012 68% of all fishermen caught two or less. Since 2007 the composite number is 73% or 71% (we have data that suggest either) catch two or less. It is also unchanged from when the limits were ten save for first and second fish percentages swapping a little. Again, we see no real statistical data distinguishing the LLM from the rest of the regions. See below and add 1 fish percentage to 2 fish percentages.



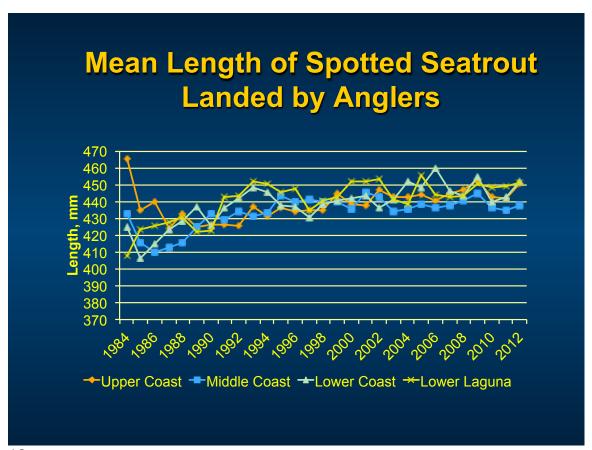
17

If anything the data shows we have a lot of fishermen who just do not have the knowledge and experience to catch fish. If you want to catch more fish learn to fish. The data on guides in the Nov. $6^{th}\,$ 2013 meeting clearly demonstrate they are not having a hard time catching more and bigger fish. TPWD cannot fix by limits or slots people who do not put time and effort on the water.

Bigger Trout in LLM?

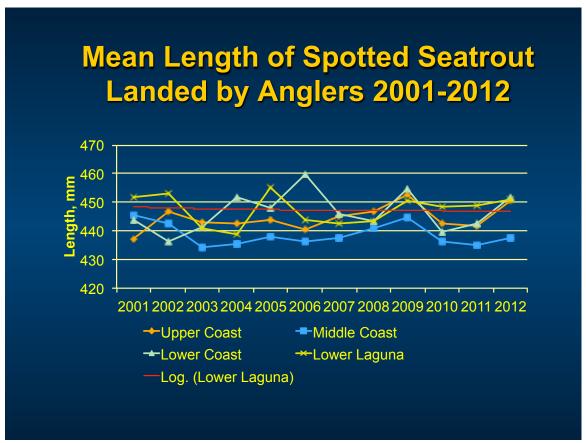
Below is the data on what is known as the mean length of trout caught. What we are looking for is a statistically significant increase or trend in the LLM versus the rest of the Coast. You decide what it is in reality.

Here is the data for all times for all regions.



18

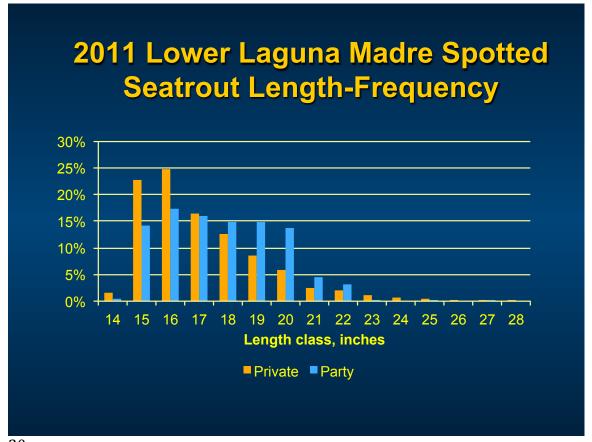
Notice coastwide the upward trend. To us that is again evidence of health in general. Now let's break it down by timeframes and look at six years before and six years after reductions in the LLM as well as other regions.



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Again we see another flat trend line for LLM. In 2012 the Upper, Lower and LLM are in a virtual tie for size. If you look at the six years before it is very close to the same as the six years after. All this needs to be put in perspective since these measurements *are millimeter measurements*. 2010 and 2011 appear to offer some support for the LLM doing better than the rest of the coast but fathom this fact. The fish caught those years are exactly six millimeters bigger than the next competing region. So if you are asked would you like to have limits cut from ten to five and the trade off is you get fish that are less than a quarter inch bigger on average how many want to sign up?

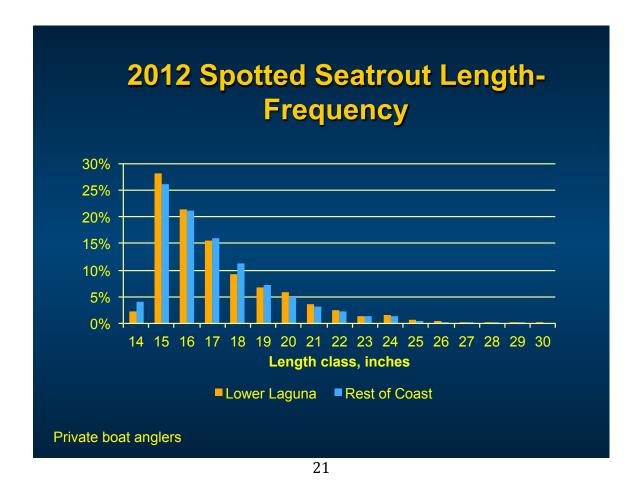
Now let's look at some remarks seen in the press about the size of trout caught in the LLM. Riechers correctly at the time said they were seeing about a one-inch size gain from the norm in landings for the LLM versus elsewhere. He had concerns about fishermen conduct that are addressed below but for now lets take just this statistic. We asked TPWD for the data on this issue frankly because those numbers are not reflected at all in the mean average length data above. What we were given was 2011-year specific data that indeed showed support for LLM producing bigger fish caught or perhaps more accurately "selected" by fishermen in the LLM. Here is what was provided:



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The normal curve for length will typically show the lowest legal size as the highest percentage fish caught. LLM for this year breaks that pattern and shows sixteen inch fish being caught more often than fifteen inch. That is indeed a single year of data that does suggest LLM fishermen are doing something to bring in bigger fish and/or there are more bigger fish out there. One would think if it is the latter data for years thereafter would continue the pattern. It doesn't

We asked TWPD to send us some other years to compare to the 2011 year and we were sent this comparison of the LLM to the rest of the coast for 2012 (see chart below). Bottom-line again LLM it not doing any better than the rest of the Coast and whatever was seen in 2011 is no longer there. There is not a percentage worth noting difference in the size of fish caught in the LLM versus elsewhere. Fifteen-inch fish are the most common caught in the LLM as well as coastwide and the same percentages of bigger fish are matched coastwide. If nothing else it shows the ups and downs that are supposed to smooth out are not happening.



High-Grading

Please be on the lookout for this word. It is used by TPWD in meetings to describe what they are learning anecdotally about fishing practices in the LLM. These

practices are admitted by TPWD to taking place and will not only effect creel studies that take size measurements but will also influence mortality rates.

As we understand the word(s) "high-grading" it means fishermen in the LLM are releasing legal but smaller fish so as to take home bigger fish. As long as it is done right when the fish is caught we have no problem with the practice but from personal knowledge we are aware of guides who encourage "culling" from fish already on a stringer. TPWD admits some form of targeting bigger fish is taking place in the LLM. If it involves "culling" we think it is an unethical practice and hiding the practice behind a euphemism like "high-grading" is wrong. This is what Robin Riechers had to say about LLM fishing practices when he talked to the commissioners in November of 2010 when scoping for reduced limits was first addressed.

"They're targeting larger fish. It either means they're discarding those fish when they first catch them, waiting on larger fish or it means that we have some high grading going on. They actually discard those fish some time during their trip when they catch a larger fish.

So what that tells us about any considerations of bag limit changes is that we may not see -- we have some behavioral changes and we may not get the anticipated results because of those kinds of shifts. So basically we're going to increase our release mortality with that kind of targeting behavior."

In the Corpus Caller Times, David Sikes 2010 article Riechers says after addressing high grading:

"We haven't seen as great a benefit as we expected," Riechers said about the department's management strategy down south."

Whatever the practice is, if fishermen are now going for bigger fish and killing some smaller fish because they can only keep five it is wrong. This is a very undesirable but real effect and it is not something we want to see unless true solid science says we need to change and that change will outweigh this clear abuse.

Let us wrap this up by reminding all and TPWD what their role is or should be in deciding whether limits should be reduced. This is from TPWD's website.

Mission

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.

Philosophy

In fulfilling our mission, we will:

• Be a recognized national leader in implementing effective natural resources

conservation and outdoor recreational programs;

- Serve the state of Texas, its citizens, and our employees with the highest standards of service, professionalism, fairness, courtesy, and respect;
- · Rely on the best available science to guide our conservation decisions;
- Responsibly manage agency finances and appropriations to ensure the most efficient and effective use of tax-payer and user fee resources;
- Attract and retain the best, brightest, and most talented workforce to successfully execute our mission. (Emphasis added)

If TPWD sticks to the "best available science" and ignores those who have their ear this is an issue that should be very easy to decide. Notice in their mission statement you do not see any reference to "trophy management" but you clearly see "Conservation". You also do not see anywhere in their mission statement authorization to make any changes based on what is popular with influential organized groups. This issue viewed solely from conservation and a science standpoint screams out that we are not in need of change and we should not let any group influence the outcome.

UPDATE in the FAQs the last line in the answer if trout are overfished TPWD clearly says NO BUT then says:

"A reduction in landings would increase the number of older and larger fish in the population."

Despite all the evidence cited above to the contrary above, think about this position. It is a blatant admission they favor one group of fishermen and their style over another. This is classic CCA inspired trophy management pure and simple and has nothing to do with the overall health of trout.

If the science said our ten limits will reduce opportunities for future generations then we have a conservation issue. But it doesn't. If you think outside influence is not at play consider this statement by the Chairman of the TPWD. The context is Robin Riechers has just shown his slide "Status of Spotted Seatrout" referenced above that shows the record improvements and whether to scope or not is being discussed. Pay attention to who gets mentioned before "our constituents".

"I know it has been scoped before and I would like to see it scoped again. Just take it out and talk to **the CCA people** and talk to our constituents and see what type of feedback we are getting...."

We suspect this paper will not be well received by those who believe despite the facts above TPWD should reduce to five so we can catch bigger trout. Assuming just for arguments sake the science says reducing will achieve this goal why should TPWD look after your interest over the fishermen who are just as happy as you having ten in their icebox? Remember there could come a day when some other well-organized interest may clash with yours. Our point is no group should have TPWD's ear and TPWD should stick to their mission regardless of who is not happy.

If the science said we have to stop catching ten or future generations will lose opportunities then we will be the staunchest supporters of reductions. BUT the truth and the facts are trout are doing quite well despite the few hard working and knowledgeable anglers who manage to take ten.

In the absence of science if TPWD reduces limits it can only confirm they are ignoring their own mission statement and philosophy and are controlled by outside politics.

References:

Below is a link to a folder in the directory for the domain rdonato.com. Sometimes your browser may question the site you are attempting to access but it is 100% safe. So say yes. It is a personal site we are using to host the data and again it is safe. Inside the folder "trout" you will find the below files or folders

- 1. BackUp.pptx: this is PowerPoint presentation that has every slide in the order they appear in this paper. Again in most cases they are TPWD created slides and anyone familiar with charts and graphs who has Excel can right click on the chart and access he raw data in Excel
- 2. November Commission Presentaion.ppx: is the original Nov 6th 2013 PowerPoint used by Robin Riechers at the Nov. 6th 2013 meeting
- 3. 20131106_com_00_work_session.mp3: is the very long unedited audio of that meeting. Discussion of Flounder and Trout regulations & limits begins at Flounder 3:05:45 and Trout at 3:18:50
- 4. The folder "audio cuts" has certain cuts from the above audio file that are referenced in the paper
- 5. Nov 3rd 2010 Commissioners meeting.pdf: is a PDF transcript of the first meeting by TPWD on scoping for trout limits referenced in the paper
- 6. The folder "NewsPaper" has all the referenced sports writer articles in PDF form

- 7. The folder "Misc" has PowerPoint slides and Excel data sent in response to specific requests but not a part of the 2013 presentation.
- 8. TroutTruths.pdf is this paper in PDF
- 9. Dec 2013 TPWD FAQs

http://www.tpwd.state.tx.us/newsmedia/releases/related/2013-12-18_scoping_coastal_faq/

LINK

http://rdonato.com/public/trout/